A Design Primer for Cities and Towns

This Primer Belongs To:

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Title

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Address

A Design Primer for Cities and Towns

Anne Mackin

Alex Krieger

A C K N O W L E D G E M E N T S

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September 1989

Dear Reader:

The Massachusetts Council on the Arts and Humanities is delighted to present you with *A Design Primer for Cities and Towns.* Our intent is to enable public officials and citizens to become more effective advocates, consumers, and decision-makers in the design of their communities.

The *Primer* is the latest of the Council's efforts to provide technical design assistance to Massachusetts communities. We have talked to planners, designers, public officials, and citizens all across the Commonwealth to learn what is needed to improve the quality of design in the public environment. We found that people wanted to know more about the design process: how decisions are made; what kinds of questions to ask; and where to find the answers.

The Council has instituted several programs to address these issues:
◆ The Governor's Design Awards Program recognizes exemplary designs as diverse as a wastewater treatment plant in Montague City, the Children's Museum in Boston, and housing for the elderly in Hyannis.
◆ The Rural Design Assistance Program enables small towns to undertake design and planning projects aimed at preserving or strengthening their character.
◆ A bridge design workshop and upcoming competition were devised to improve the design quality of the more than 100 bridges constructed each year in Massachusetts.
◆ The Council works with Administration and Finance officials to demonstrate how proposed design projects may be monitored for quality and excellence.

We hope the *Primer* will be a valuable tool for you as you continue designing and planning for the community's future. We are eager to hear your response!

Nicholas T. Zervas

Dr. Nicholas Zervas
Chair, Council Board

C O N T E N T S

" The town is new everyday. "

ANCIENT PROVERB

THE AIMS OF THE *PRIMER*
AND HOW TO USE IT

The *Design Primer* is intended to help citizens and local officials participate more, and more confidently, in the shaping of their environment and make their communities become more the way they would like. The *Primer* explains the implications of different design decisions for the residents of cities and towns who will be affected by these critical decisions and who must recognize opportunities for improvement that are easily lost without effective action.

The *Primer* identifies principles critical to planning better civic environments, and discusses the decisions that shape our communities. It emphasizes design considerations because design is both critical to town planning and often a difficult process for citizens to understand. Each section of the *Primer* suggests tools for implementing these principles, and the reference section at the back contains lists of useful resources for technical assistance.

Each section in the booklet explains a certain aspect of design as it affects planning or development, and provides a list of suggestions and illustrations that show how the community might take action to achieve the desired ends. The sections may be read continuously or used as thumbnail references.

The modern landscape—as it changes rapidly around us—offers particularly difficult challenges—with many huge tracts of development that are neither cities or towns or neighborhoods but vast expanses of continuous, uncontrolled growth. The *Primer* addresses the principles that have traditionally governed good city and town design on the premise that an understanding of these will enable better planning of both established communities and the developments that spread around them.

DAVID PLOWDIN

1

INTRODUCTION

We all participate in the process of changing our environment—either inadvertently or deliberately. We make our impact felt daily through every kind of human process. As members of the public, we have more influence than ever before on the way our cities and towns are built—through practices such as zoning, development restrictions, preservation laws, design guidelines and review, and entities such as planning boards, citizens' committees, and the historic town meeting. With this power comes a responsibility that is new to most of us. This is the responsibility to educate ourselves and to acquaint ourselves with the effects of design and planning decisions. We can now see that decades of zoning bylaws and years of design guidelines have not automatically produced superior environments—either more beautiful or more hospitable and usable than earlier, less publicly-guided development. Rules and guidelines are only as good as the insights that create them and the wisdom with which they are applied. We must continually learn from our earlier mistakes and triumphs in the pursuit of better places to live.

The civic environment we create—through both public and private development—reveals much about our character. The places and things we build govern the way we perceive our culture, what we share with our fellow citizens, and what we leave to subsequent generations. They reflect our commitment to improve our world.

Our modern cities, towns, subdivisions, office parks, malls, and strips reveal a democratic society that exercises considerable thrift in expenditures on the public realm. At the same time, we often aggrandize our private realms. We are an intensely commercial society, as well as a society increasingly concerned with leisure and entertainment. Many of the developments that consume our landscape, for example, are second-home or resort communities. On the other hand, our public domain—reflected in the average capital improvement project—receives funds that seem dwarfed by the salary of a baseball hero or by television and movie budgets.

We must remember the importance of the public realm: the importance of formal and informal gathering places; the importance of buildings, streetscapes, civic centers, parks and gardens, that inspire pride among citizens; the importance of beauty and art to convey the vibrance and aspirations of our culture; the importance of a gentle treatment of the natural environment. We must exercise our increasing powers to oversee public and private development to ensure that our communities are what we want them to be. And we must know what we want from our environment and ensure that our laws and review systems will lead us toward it.

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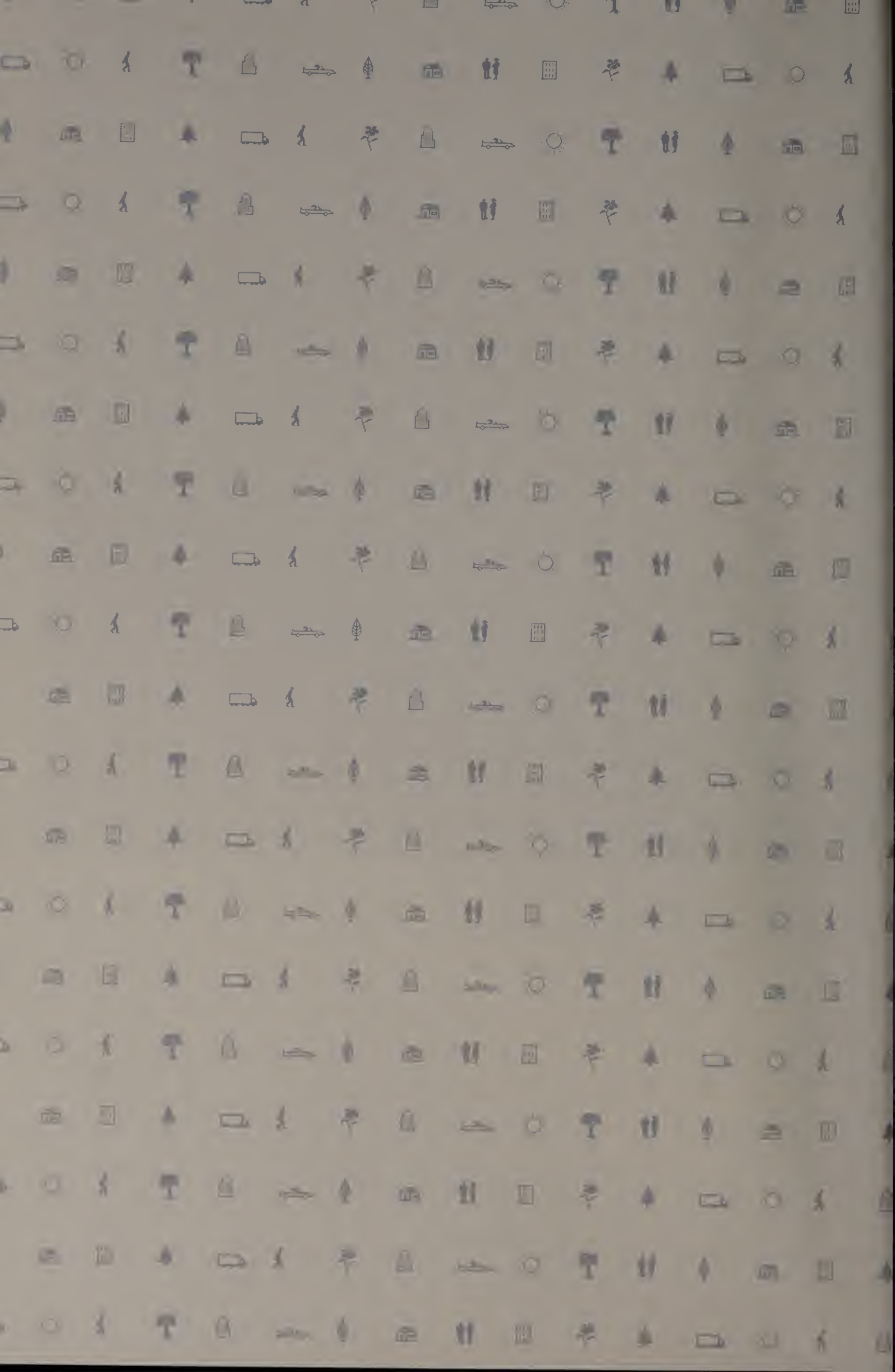
Cities, towns, and neighborhoods are extraordinarily complex

entities which frequently seem beyond our powers to plan or design.

Yet, every aspect of our built environment results from a decision,

albeit sometimes unconscious. We decide the heights of buildings,

the width of the streets, the adequacy of lighting, the sizes of lots,

the types of uses, the character of architecture, the number and

generosity of civic gathering spaces. Each of these design decisions—

no matter how small or particular—in turn affects others, and thus

the character of the overall community. And each is changeable and

may be improved if a better idea comes along. Knowing this should

increase our confidence in the possibility of designing better com-

munities, and enable all of us to demand better design decisions of

planners, designers, public officials, and ourselves.

1 PLANNING AHEAD

" So the first question — and I

think by far the most important

— about planning cities is this:

How can cities generate enough

mixture among uses — enough

diversity — throughout enough

of their territories, to sustain their

own civilization?"

JANE JACOBS

Good, foresightful planning makes good design more likely. Planning shapes the community and creates the opportunities for well-designed buildings and open spaces to make the greatest contribution to their setting. It determines the impact to be made by large new developments and can also be used to slate older areas and neighborhoods for needed improvements. Through planning, the community designs itself.

THE CHANGING SCALE OF COMMUNITIES

Lewis Mumford praised the early New England village for its refusal "to grow beyond the possibility of socializing and assimilating its members." The fact that the layout of a community, including its size, is linked to social cohesiveness has long been a compelling notion in town planning. The essence of a small town, of the size Mumford praised, lies in neighbors knowing each other as well as their grocer, pharmacist, family doctor, and elementary school teacher. In the small town, communal activities—shops, schools, and offices—lie within walking distance. When growth takes a community beyond this size, the fraternity of small town life can still be retained in individual neighborhoods which provide some of the same proximities.

Since the time of the exemplary New England village that Mumford praised, social, commercial, and technological revolutions have transformed urban and rural America and vastly enlarged the scale of our settlements. Today, we see a landscape of cities and towns of many sizes and diverse characteristics, and many large settled areas that are not cities or towns in any traditional sense, but large expanses of continuous, strikingly uniform development.

The dispersal of human activities over large areas has raised many obstacles to maintaining community identity or boundaries. The commercial strip extending for miles, the shopping mall, the office park, the isolated motel, and the residential enclave without any civic or commercial facilities are examples of contemporary environments that would have been unimaginable a century ago when concentrated populations and activities typified all but rural settlements. These widely separated uses seem only partially inhabited by traditional town standards—abandoned for portions of every day, lacking identity, and mixing strangers in a competition for the best parking lot rather than any neighborly activity. They strain our environment, our desire to own and belong to a community, and our humanity.

Reserving large zones for single family residential use was once considered a way to limit development. The resulting carpet of single family homes seen above has little open space and few amenities. It places heavy demands on local resources, and is often considered exclusionary by those who find multi-family housing more affordable. Newer techniques to avoid this problem include cluster development; mixing housing with commercial and office uses for more concentrated, less dispersed development; zoning for open space preservation and resource protection; application of state acts protecting wetlands and scenic roads and rivers and programs protecting groundwater, lakes, and endangered species.

This landscape resulted from conventional land use practices. It comprises: 1) Office parks and light industry; 2) strip shopping; 3) a late nineteenth-century street grid; 4) the railway line which probably figured in the settlement of the area; 5) a highway, the community's modern umbilical cord; 6) mid-twentieth-century single-family subdivisions; 7) the model community of Radburn. The community of Radburn was built in the 1930s convenient to the railroad and shopping. Its housing clusters demonstrated a new way to create more public open spaces. Its model characteristics were ignored by developers of the typical subdivisions in the right half of the photograph.

We tend to take such disaggregated environments for granted until a rise in oil prices, a new study on diminishing open space or air pollution from automobiles, or simply a broken-down family car reveals how wasteful and inconvenient such dispersed environments can be. If we would like to manage development to produce a healthier and more beautiful environment and more cohesive communities, we must begin to learn how we have arrived at the landscape we occupy and how planning may be used to take us elsewhere.

> "From the earliest days of the Industrial City there was a strong desire by the few who could afford it to escape its smoke and grime and even more its unlovely landscape. So with the Industrial City came the suburb…These settlements had no central function—they did not rule, sell or make. They were places where people found space."
>
> JOHN KENNETH GALBRAITH

SUBURBANIZATION: IDEALS AND IMPACTS

We seem to build continually anew on the periphery of existing settlements. The reasons for such a dispersal are complex, rooted in both cultural aspirations and technological progress. Emerson's wish for a physical setting, and a frame of mind, between town and country where the virtues of both could be simultaneously enjoyed has been shared by generations of Americans. The ideal of the bucolic setting a little removed from the bustle of town, as a place to live and raise a family, has lured us—enabled as we are by new forms of transportation and communication—to spread ever-outward from existing towns and cities.

The many benefits of suburban living became quickly apparent to urban-dwellers at the turn of the century. On the periphery of town a family could escape congestion, pollution, and the stressful pace of urban life; live in a new, more healthful setting surrounded by nature; and still partake of the activities of the relatively nearby town center.

The limitations of suburban growth emerged more slowly, and generally in direct proportion to the increasing number of Americans living in suburban settings. Over the course of the twentieth century, the very advantages of suburbia, soon available to and attracting more and more people and services, insured that many urban problems would follow directly. Unfortunately, further retreat is still a more common response than trying to reassess development patterns.

The train, trolley, and automobile carried these outward-moving tides of settlement. Cars went naturally with the trend toward suburbanization. They were the principal means of escape from less desirable areas. By the early 1920s the car also began to transform the main streets of towns themselves. Parking lots, gas stations, and repair shops began to create gaps between storefronts, businesses, hotels, and restaurants— a change accelerated by the devaluation of real estate in the Depression. Development took on patterns suited to the motorist rather than the pedestrian, and commercial strips began to sprawl out of town along Main Street.

> "I wish for rural strength and religion…and city facility and polish. I find with chagrin that I cannot have both."
>
> RALPH WALDO EMERSON

We now find ourselves planning communities in which it is necessary to own a car to travel to the store, work, and neighborhood institutions. Children and the elderly are particular victims of this dependence—needing to be chauffeured about for the simplest of their needs—as are those who cannot afford cars or cannot drive them. Ironically, the car which promises so much freedom and choice has, by facilitating the creation of car-dependent environments, often diminished the accessibility and choices once available within traditional town environments.

We are not going to abandon our automobiles. They are too important and convenient. However, we can design communities that reduce our dependence on the car—communities where we can walk to businesses, shops, and schools, know a few local merchants, rely on some form of public transportation, and spare the natural environment.

Another consequence of dispersed development is the privatization—under single ownerships—of larger and larger parts of the landscape, which inevitably leads to a loss of the vitality common to town and city centers, and to the loss of an identifiable community. In a town environment, the size of development is generally governed by the existing network of streets, squares, civic institutions, older buildings, and land ownership patterns. The distinction between public and private realms is clear, with private development generally deferential to the public environment. But along a strip, the public street and the private parking lots merge indistinguishably. Minimal public amenities such as sidewalks are usually absent. Buildings do not help shape the street, but retreat to the parking lot, leaving large signs to advertise their whereabouts. Such settings share a striking anonymity, and lack identity, or human scale, or places for gathering or socializing.

Suburban development attempts to overcome such anonymity in telling ways. The concourse of the shopping mall attempts to recreate the sociable activity of the small-scale shopping street of the city or town. On any given evening or weekend, teenagers, couples on dates, parents and young children fill our suburban malls. Watching all of these people stroll up and down the concourses—and watching them watch each other—proves that shopping is the secondary activity. People come to enjoy the closest approximation the suburbs offer of an active, sociable street. What we cannot enjoy at the mall is the richer variety of activities other than consumerism, or the sight of familiar faces, or the out-of-doors, or a sense of ownership and community. We must leave when the mall closes and we cannot influence the programming of the activities scheduled to attract us there. As we embark on the trends of planning and lifestyle that will take us into the twenty-first century, it is worth assessing what we are currently missing, and taking aim to correct this.

The arcadian image of the early suburbs held great appeal for city-dwellers. The congenial grouping of well-maintained houses in a natural setting allowed neighbors a sense of both community and privacy, but more of the latter.

The growth and dispersal of Framingham between 1950 and the mid-1980s exhibits a typical pattern. The downtown actually became smaller and less dense as development sprawled beyond it.

1950

1985

9

A NEW ROLE FOR ZONING

In this century, zoning has become the principal means by which communities regulate the use of land and, consequently, the patterns of their growth. The public regulation of land uses became increasingly necessary as residential environments came into conflict with growing industries, transportation lines, and urban congestion, and as suburban residential growth encroached on incompatible rural uses. Around the time the car became popular, in the 1920s, new federal and state legislation empowered municipal governments to control land use on the basis of locally-produced master plans that established the new use zones.

Although slow to catch on, partly because of early fears that it took away the owner's right to control his or her property, zoning became, after World War II, a powerful tool in the single family homeowner's pursuit of the American dream. It protects property values and the homeowner's quality of life by keeping nuisances at a safe distance. Many of the legal cases that have helped to define municipal zoning powers have revealed the unexpected ability of zoning to exclude different ethnic and economic groups as well, and have attempted to restrict these powers.

The vast powers of zoning to reshape our landscape are becoming better understood with practice. Contemporary development shows that this important public planning tool has been applied too zealously at times in order to segregate uses. The appealing tidiness of compartmentalizing the residential district, the office park, the shopping district, and the light industrial zone has yielded unexpected social consequences. Jane Jacobs points out the sad fate of single-use areas which are abandoned for part of every day—homogenous, antisocial environments vulnerable to crime.

This thriving main street exhibits an equilibrium between the automobile and an inviting promenade for pedestrians. Many of the characteristics of this view—narrow streets, houses placed closely together, a mixture of commercial and residential uses—would be prohibited by conventional zoning ordinances.

CITY OF CAMBRIDGE

Many large parking lots can devastate a downtown, separating buildings that might, if closer together, become the setting for bustling and sociable activity.

A community can take an important fundamental step toward safeguarding or improving its character, and the lifestyle of its residents, by examining its existing zoning regulations. A community trying to revive or preserve its downtown, or minimize sprawl on its periphery, should think about the power of zoning not just to segregate but also to integrate uses and thereby activate civic life. Reducing the number of single-use zones can decrease the need for travel and resulting congestion. (And, after all, the proximity of the smokestack and tannery are less frequently a problem today than a century ago.)

Recent zoning innovations include clustering development to preserve open space; creating "overlay districts" to protect sensitive areas; combining activities such as shopping and business with residential space; diminishing the number of separate use categories, keeping stores and offices close to the street rather than set back behind parking lots, mandating public amenities, and transferring development rights in order to preserve historically sensitive neighborhoods while stimulating areas in need of revitalization.

Zoning is not a planner's panacea, but it is very important, as are the lessons learned through decades of exercising it. The key to successful zoning lies in the vision of a community behind the ordinances.

THE SPIKE IS DRIVEN CONNECTING ALL THE MALLS IN AMERICA

11

The photograph above shows a typical strip shopping mall on Cape Cod. At right are three views of the same shopping mall rebuilt as Mashpee Commons. The new shopping center is broken up by small streets and outdoor pedestrian malls with landscaping and plentiful street furnishings. An elaborate plan now underway would fill in the parking areas surrounding the mall with housing and communal services, completing this remarkable effort to turn a shopping mall into a town center for a town that currently lacks one.

T   A   K   I   N   G

◆ *Create a zoning plan to combine uses and create neighborhoods with essential amenities and services within walking distance of each other. See model zoning guidelines on page 67.*

◆ *Keep institutions such as schools in the neighborhood as much as possible, and within walking distance. Any developer proposing a large new housing subdivision may be asked to provide space for neighborhood amenities and to relieve the local taxpayers of the extra burden created by the new population the development will attract.*

◆ *See the "Street Smart" section in Part II for suggestions on creating a less automobile-dominated environment.*

◆ *Create tax incentives and other economic programs that will help small shopkeepers stay downtown where they add life to the street, provide convenient, economical services, and remain neighbors and members of the community in a way that large businesses cannot.*

◆ *Remember that zoning influences the amount of driving we do. Zone to encourage a mixture of uses downtown.*

A C T I O N

◆ *Zone stringently but judge the consequences frequently and modify bylaws based on how they are working.*

◆ *Zone to encourage a mixture of uses, other than heavy industry. Subdivision by laws and zoning may be applied together to create residential neighborhoods which have corner stores, parks, and public institutions such as schools or departments of recreation. Zoning can also create downtowns with residential space above stores and businesses.*

◆ *Take care not to zone residential districts too exclusively. By allowing the rental of small units in owner-occupied apartments, a community can provide housing for the elderly, and for the store clerks, bank tellers, and service workers in the community who might not otherwise be able to live there, and whose daily commute contributes to local traffic congestion.*

◆ *Tighten land use controls by designating fewer areas for strip development.*

THE IMPORTANCE OF PLANNING

The practice of municipal planning arose in part through the new institution of zoning, which required local master plans. Planning has always been a way for a community to envision the city or town that residents would really like, even when it was only an agreement among neighbors to build a schoolhouse. It has now become a more sophisticated tool with which to remedy existing problems and prevent new ones from arising, provide needed amenities, and direct growth in ways that will benefit the locale. We have also learned that a master plan can never be considered finished. Plans must change to accommodate changing needs.

Planning has also become a cooperative effort between the public and professionals. A community can hire its own planner or a consulting planner to help residents decide what types of development to try to attract, and what types to avoid or carefully control. In addition, planning helps position new development appropriately and foresees and controls the impact on the community for the better—creating guidelines which will prevent disaster and achieve the maximum benefits for the local area. As a community grows, it needs to update and enlarge its planning capacities to keep abreast of increasingly complex problems.

For cities and towns undertaking or expanding a program of planning, review of available planning tools and resources is a good first step. The complexities of modern development patterns—which often abandon city and town centers and sprawl at their outskirts—are many. Every resource that can be marshalled will be helpful, as will a review of the successes and failures of existing local planning practices. As resources and assistance are recruited, the difficult task of self-evaluation begins— the initial planning exercise in which a community assesses the assets it wishes to protect, the problems it wishes to solve, and the practices that have failed to date to accomplish either.

The arsenal of planning weapons available to a community includes local, state, and national regulations and a variety of state programs. The local controls typically used to protect cities and towns are zoning laws, board of health regulations, building codes, design guidelines, and the rare building moratorium. State laws protect wetlands and scenic roads and rivers as well as groundwater supplies, and historic districts or treasures listed on the *State Register of Historic Places*, plus potentially valuable archeological sites. State programs offer varying levels of fundings or technical assistance for everything from resource conservation to main street revitalization.

This brand new development in Quincy faces Boston across the Harbor. It borrows from prototypes of early New England settlements, including the fishing village—its most successful aspect. The boardwalk, benches, and outdoor cafes surrounding the new marina were crowded with shoppers and strollers even before construction was complete.

Alternatives to the suburban subdivision now strive to combine homes, public open spaces, commercial and business development, to recapture the density and vitality of small-town America. This example called Kentlands—currently under construction in Maryland—was designed by the leading advocates for incorporating the principles of small-town design in our suburbs, Andres Duany and Elizabeth Plater-Zyberk.

TAKING ACTION

◆ *If your town does not have a planning office, consider hiring a planner, or hire a consultant in order to get an idea of the scope of planning your community needs before you look for the right permanent employee. The same applies to cities which may have planning departments too small to meet the needs of their large population. Planning services may seem expensive, but they can actually save the community, its way of life, and its pocketbook.*

◆ *A municipality which cannot afford a planner may be able to accomplish a great deal by using some of the planning resources and assistance listed in the reference section of this primer. To keep up with changing state programs from year to year, check with or call your state senator or representative for suggestions on appropriate sources of grants or technical assistance. The Secretary of State's office sponsors an information line which can help locate state agencies and their programs. Your regional planning office should be able to help you learn about and apply for state funds, and the planning staff can put you in touch with neighboring communities that may have useful information or resources to share.*

◆ *Rely on resources within your community for help in planning and implementing improvements. The Historical Commission and the Conservation Commission may have members with time to volunteer. Merchants may help buy benches or fund the maintenance of a new park. The local band or orchestra may help raise funds for a new bandstand. School children may help in preliminary impact studies by making traffic counts or other simple studies, such as looking for endangered species. The Rotary Club may pay for trash receptacles on Main Street.*

◆ *Several schools in Massachusetts have graduate-level planning and design departments. See the list in the "Finding Help" section in the back. Graduate students may be a good source of diligent but inexpensive planning interns. Occasionally a professor is interested in using a local planning study as the focus for an entire course, in which case a city or town gets the benefits of many good minds, exploring a host of options and insights.*

2 PLACE & SITE

" A landscape should establish

bonds between people, the bond

of language, of manners, of the

same kind of work and leisure,

and above all a landscape should

contain the kind of spatial

organization which fosters such

experiences and relationships;

spaces for coming together to cele-

brate, spaces for solitude, spaces

that never change and are always

as memory depicted them. "

J. B. JACKSON

The growth of a town must occur, in part, at the expense of what is already there, so the town's dilemma lies in forging a balance between development and preservation. In this sense, a town is like a palimpsest, a parchment from which sections of writing have been erased to make room for a new text. The older text, imperfectly erased, may still be read, just as the historic patterns of a town should survive and influence new development.

LOCAL TRADITION AND HISTORY

The farming village, the mining town, the whaling and shipping ports, the mill village, and the factory town: New England's history is written in its landscape. Millions of tourists annually come to see this rich history and find the origins of democracy in still-surviving villages and their town meeting halls and commons. History has left not only quaint building patterns that seem well-suited to the landscape, but a record of deeper meanings that we share as a community, too: the simple political system of the New England village represented in its humble layout, the burgeoning of trans-Atlantic commerce reflected in the earliest colonial mansions, and the birth of the American Industrial Revolution in New England mill towns, to name a few.

When a community considers development and change, it should examine both the historic building patterns that give the community charm and the deeper identity reflected by those building patterns. Tradition lies not only in the materials and forms used but in the planning principles that guided settlement, and the relationships and ways of life these principles fostered among townsfolk.

There is, of course, a tendency to sentimentalize the past. Things were not always better then, and modern technology and planning insights bring vital contributions to the life of a town. Development should help maintain the best traditions of a town while supplying new elements the town needs in order to work better. New development can be thoughtfully placed to create a center for a sprawling, nebulous settlement, or it can bring amenities and services to a needy neighborhood. It can provide public gathering places where they are lacking, and contribute small open spaces to a community-wide network. Often, new development is a source of needed tax revenue and employment. The community's assessment of itself, prior to reviewing proposed development, should therefore include both the best and worst aspects apparent within it. This self-evaluation will lay the foundation for more cohesive, intelligent decision-making on any new project proposed, and it will allow the community to try to attract proposals and developments of the type it needs and wants most.
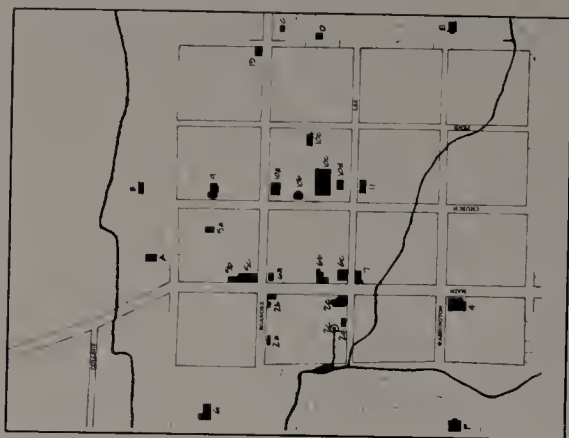
These photographs of Topsfield, Newburyport, and Lawrence, show a few of the distinctive styles of settlements in Massachusetts: the agricultural village, the port town, and the industrial city.
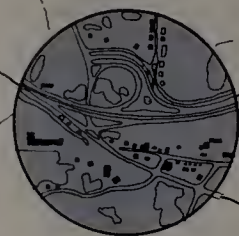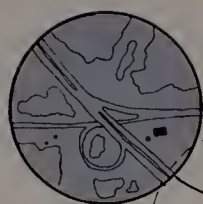
1840

1921

1985

This diagram shows the different neighborhood centers within a larger community and how they form districts. It could be more richly annotated to show character and types of development in each neighborhood, bus routes, or any other important features, such as traffic congestion or parking shortages. Most neighborhoods may be expected to transform through either growth or stagnation as seen in the three boxes at left, which show how the original sixteen-block center has evolved since 1840.

T A K I N G

◆　Look at a map of the community. Circle individual neighborhoods and mark their centers. Highlight the main routes that connect them. Identify neighborhoods that need development or services, and those that are experiencing too much development pressure. See where development is threatening to overwhelm or displace neighborhoods.

◆　Develop a comprehensive study or master plan of the municipality's economic and physical strengths and weaknesses, which shows how they are related. (For example, the death of certain industries may have left an abandoned manufacturing infrastructure to be dealt with. Or the flight of residents to other areas where jobs are more abundant may have left a decaying village. Or a small town with a residential tax base may find it hard to muster the funds to evaluate or fend off large developments threatening to destroy town character and may want to selectively recruit certain less intrusive types of development under the terms of its own design guidelines.)

◆　Assess historic architecture and building patterns for important characteristics and clues to local history. Style and materials can provide interesting information about the community's origins, its source and level of prosperity, and commerce with neighboring regions. Use these clues to identify the important characteristics of the community that make it unique.

◆　If your town is small and lacks a rallying point or sense of its own identity, mark civic buildings, public open spaces, and commercial development on a map of the community. Examine ways to define the center more formally through new architectural or landscape treatments. See the "Finding Help" section in the back for sources of assistance. A community may also formulate bylaws which insist on responsible contributions from developers in improving the town. Fund drives and local merchant and business contributions will sometimes produce the necessary revenues for an open space improvement project if state or local funds are unavailable.
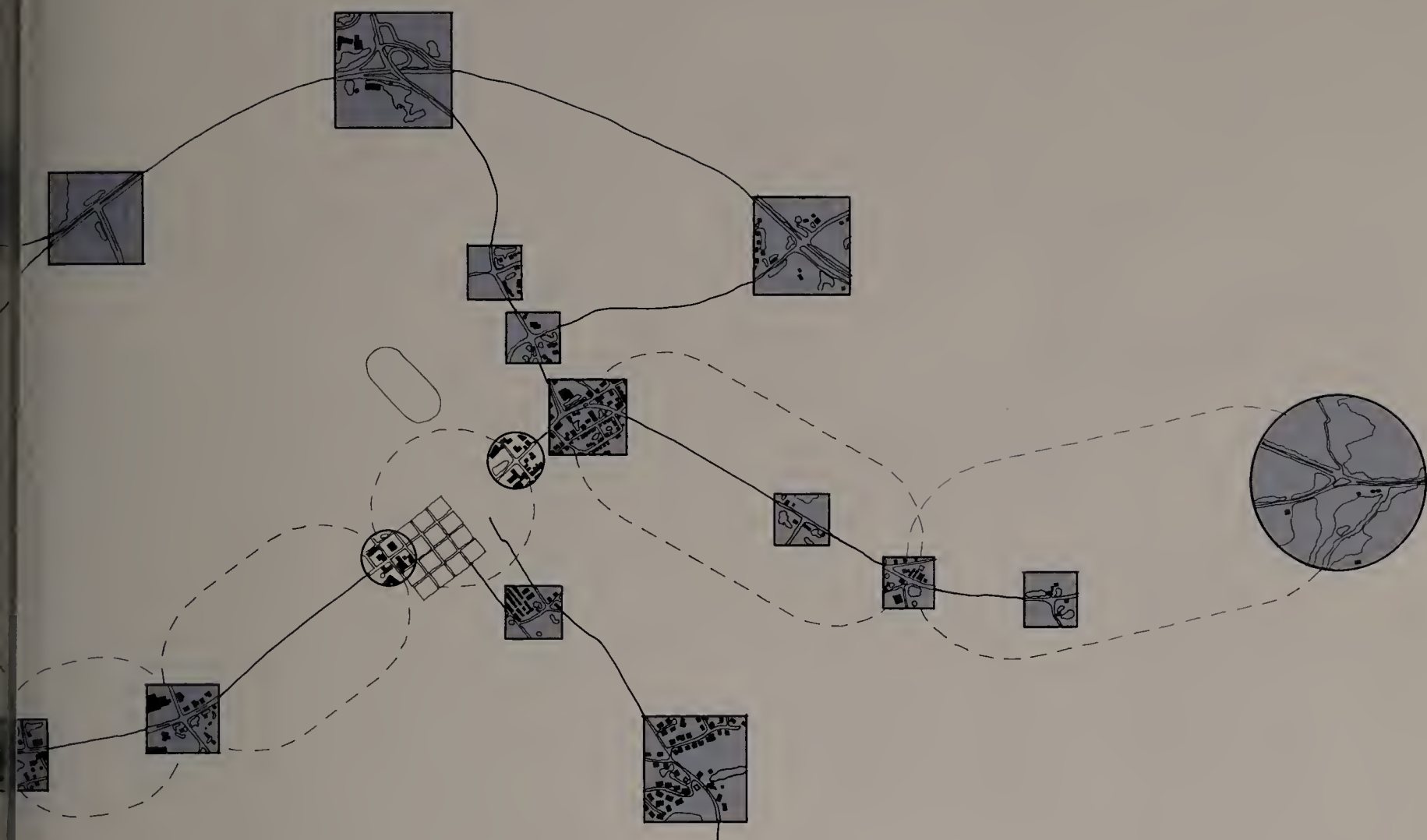
A C T I O N

◆ Take advantage of distinct historic neighborhoods and districts to create variety in the streets and architecture of different areas by alluding to historic patterns within each neighborhood.

◆ Control development through bylaws, guidelines, and built-in bargaining methods that allow a community to give the developer something (such as increased density) in exchange for a contribution such as open space. Insist on sensitivity to the public domain, and planning that thoughtfully considers the community and not just the success of the development.

◆ Zone to concentrate development around existing centers or create new ones for neighborhoods that lack them.

◆ Prevent uncontrolled development, such as low-rise strips, that detract from local character and make demands on the community's resources without offering much in return.

◆ Consider where traffic and parking will increase as the result of a particular new development.

◆ Use design guidelines to encourage the use of architectural details and materials—in new buildings and street furnishings—that blend with those of the surrounding older structures. Historic details and materials need not be used slavishly, but they should inspire details and material combinations that are congruent with modern techniques of construction.

◆ Encourage respect for traditional scale and massing of buildings. Although it may not be practical to duplicate these, a sympathetic approach pays off in a harmonious streetscape.

◆ Beware of monotony: a group of brick buildings without detail and without imagination will not contribute to town character just because they are made of a historically popular material. Demand detail, imagination, and attention to the experience of pedestrians and drivers passing by or using the buildings.

THE SURROUNDINGS

" In town design the relationship among buildings is more important than anything else. "

DANIEL BURNHAM

The surroundings of a site will influence prospective development in several ways. Plans must incorporate advantages such as sun, views, or heavy pedestrian traffic, and mitigate disadvantages such as an expressway nearby, an isolated site, or a high water table that prevents underground parking. They must also consider neighboring buildings. Can a new building be manipulated so its upper stories do not entirely block the views and sun of neighboring buildings? Would joint parking accommodations benefit several buildings? Could a pleasant pedestrian link through a large block or to a neighboring park be created?

The number of people who frequent the area, and for what reasons, will determine how a project will collect visitors. Traffic patterns will dictate service access and parking entrances. The style and size of nearby buildings should dictate something about the massing and character of any new buildings and landscape elements or open spaces to be provided in the new development. The orientation of the site may dictate how many windows of what size go where.

The successes of the surrounding area—those which contribute to community life—should be emulated, and the pitfalls avoided. For example, a new office building in a thriving residential area or an area of mid-size commercial and institutional buildings should conform somewhat to the building types around it. A one-story commercial strip, on the other hand, should not inspire another one-story building. Instead, place offices, storage, or residential units above the main commercial floor to counter the waste of land and grim aesthetics offered by such developments. Zoning and design guidelines can be used to dictate maximum and minimum heights on commercial streets, which will usually mean the placement of offices, storage, or residences above stores.

After the failures of urban renewal, adaptive reuse of historic buildings, rather than razing and rebuilding, has become an important way of preserving town character. Even a new development can incorporate details of neighboring historic buildings—in scale and spirit if not in replica. Beyond respect for indigenous architecture, research may yield important clues to the events behind an old clock, statue, or derelict park—events which may deserve commemoration. Any new development will add greater richness to the community if it acknowledges local history.

Besides sun, nature demands other considerations. Topography should be respected in the design of new buildings. A building should fit into a slope, not teeter on it. Drainage should be carefully considered and run-off to surrounding areas avoided.

Surrounding open spaces should be noted as well. The new development may offer an opportunity to provide new open space where it is lacking, or to add an important link of new open space to an existing city-wide network.

A sensitively-designed infill project facing the old common in South Hadley, Massachusetts—this group of traditional-looking New England buildings house new shops and even a cinema. By studying the buildings typical of this area, the architect was able to create a different style for each building, giving the development a look of having been built up over a longer period of time.

TAKING ACTION

◆ *Locate pedestrian assets such as entrances, lobbies, large store windows, arcades, landscaping, public art, and street furnishings such as benches, lights, and trash receptacles where the flow of pedestrians is greatest.*

◆ *Parking requires both practical and visual consideration. Place access to parking near the greatest volume of traffic (although not near a busy intersection where it can obstruct traffic flow), but hide the parking area itself to whatever extent possible—underground, garaged, or behind buildings and not on the street. Where parking lots do exist on the street, plantings or attractive fences make excellent screens to hide and beautify them.*

◆ *Match size and massing of new buildings as closely as possible to surrounding architecture except in the case of sprawl development.*

◆ *Adapt historic buildings for re-use wherever possible.*

◆ *Allow neighboring historic architecture to influence the size, shape, style, materials, and detailing of new buildings, parks, and street furnishings.*

◆ *Research local history for clues to significant events or fragments of history in the area. Commemorate these in new developments.*

◆ *Review drawings to see if buildings fit the natural topography. Support the designer in taking advantage of nature instead of fighting it.*

◆ *Take advantage of views and sun without depriving others by not placing the tallest parts of the building directly against an existing windowed facade.*

◆ *Use small pavers such as granite cobbles, bricks, or asphalt units to allow rainwater to seep into the ground rather than running into the street. Turf blocks can be used for parking in small towns and semi-rural areas, and planting of all kinds is very helpful. (Turf blocks are hollow concrete pavers that can be filled and planted with grass, making a durable, but not lush, lawn.)*

◆ *Use local maps to consider links to nearby open spaces and pedestrian routes and networks, or potential networks.*

II
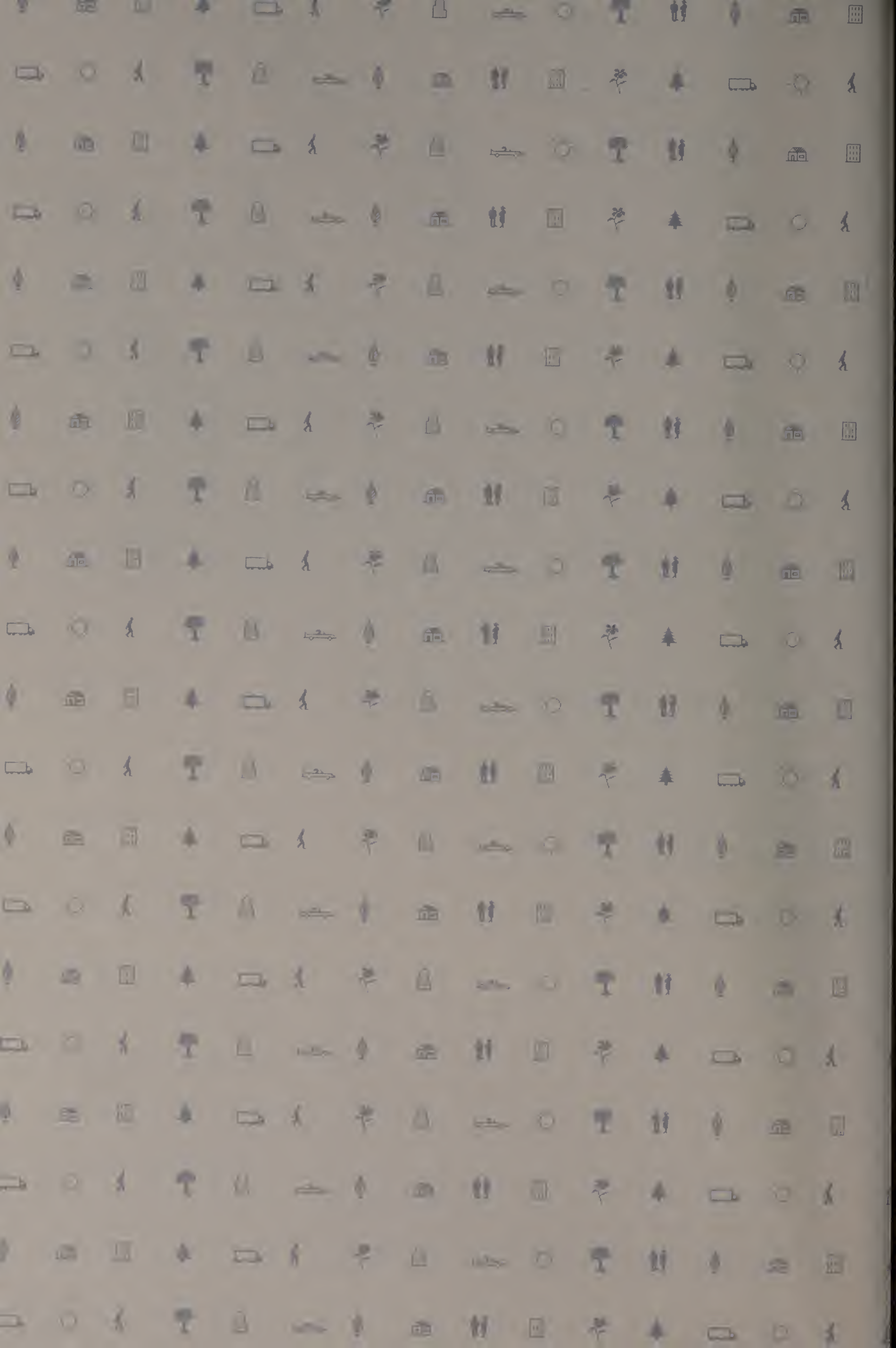
DESIGN BASICS

Planning a town is like working on many jigsaw puzzles at once. The cluster of pieces assembled to form a building, for example, becomes a tiny fragment of a larger puzzle that forms the street. Single buildings, harmonious groupings of buildings, streetscapes, parks and open spaces, monuments, public art, street furnishings, sign systems, and a host of less-visible infrastructures must find their place in the picture. Understanding the various scales of these puzzles, and that each piece relates to the others, facilitates more thoughtful design at every level.

1 THE BASICS OF BUILDINGS

Buildings are the building blocks of which we construct our cities and towns. From the humble to the monumental, the simple to the grand, and the hospitable to the imperious, each is a medium through which we convey our culture, and each building affects the way we live in our communities. Since our buildings tend to outlive us, we must support the design of buildings that satisfy not only the needs of the moment but will remain useful and beautiful across generations.

OPPORTUNITIES AND CHALLENGES

An ancient Roman treatise on architecture listed *firmness, commodity,* and *delight* as the most important attributes of a good building. These are still worthy aspirations today. *Firmness* refers to sound construction and the quality of the materials used; it addresses the engineering of a building. *Commodity* addresses the fitness of a building for both its purposes and its site. Buildings *delight* us through graceful proportions, the drama of the spaces that enclose us, and the elegance of configuration and detailing. We instinctively find delight in those buildings that appeal to us on many levels, while abhorring buildings behind which we see single-minded or merely expedient goals. Fine buildings satisfy day-to-day needs and touch our emotions. Mediocre ones rarely even do the former.

The dialogue between the public and the developer or corporation concerning the design of a building usually begins with the idea of what suits the community, the site, and the purpose of the building. In the earliest stages of design, citizens and their officials can begin to ask whether the building's appearance and function respond to the site in all the ways discussed in "The Surroundings" (p. 20) and whether it responds to the requirements of the community.

It may be easier to measure the ways that a building responds practically to its site than visually. Frank Lloyd Wright used the term "organic" to describe the proper dovetailing of building and site. While many buildings jut awkwardly out of their spot of ground, some appear naturally rooted to their site. An aesthetic response to surroundings does not mean mimicking neighboring buildings. Invention and variation are the hallmarks of both progress and artistry, and cannot be entirely denied in

EZRA STOLLER

The juxtaposition of old and new lends vitality and drama to the city.

25

The corporate headquarters above was carefully designed around a horse paddock that existed on the site.

favor of context. New England offers many historic examples of the delicate balancing of repetition and variety. The variation in houses ringing the early New England common shows this subtle sense of innovation, as does the wonderful assortment of details, styles, and heights of buildings in Boston's Back Bay. Most cities and towns have once-startling innovations that now harmonize with their surroundings. These can often be seen in a square or center in which architectural styles from several eras assert themselves and coexist peacefully.

On town peripheries, sites present still other challenges. A future context, as well as the impacts on the natural setting, must be envisioned as part of a building's design. Future traffic patterns and pedestrian approaches should be mapped out and refined. Isolated developments should be prevented, but if they are considered, future scenarios that might connect the development to local activity should also be examined. Few buildings benefit from isolation and such dispersed development consumes acres of land, disrupts ecosystems, taxes transportation systems, and creates a confusing landscape in which sprawl dominates and neither the limits of the community or its center are discernable. Remember also that a development outside of town may be the first impression that visitors or travellers gain of a town. Even an industrial development which townspeople would like to separate from the town center or residential areas might be planned with efficient connections to other similar developments.

Such siting and master plan considerations should be resolved in the early planning stages, before the design of buildings is undertaken. Local officials and residents can help ensure the project's future success by asking the right questions at an early planning stage.

SIZE, SHAPE, AND MATERIALS

A building should suit its surroundings in important aesthetic ways as well as practical ones. As a rule, a building's mass and style should respond to both the distant and immediate surroundings described above. This is often harder to practice than to preach. We frequently build a much larger scale today, with bigger buildings on bigger sites—buildings that seem to dwarf older neighboring structures. Modern materials and methods of construction can also make it difficult to blend new construction with established neighborhoods and contexts. New types of buildings, such as vast high-technology research and development facilities, are even less compatible with older structures. There are no universal solutions for such dissonance except for the use of sound judgement along with a desire to minimize jarring contrasts in scale or character.

When historic buildings—or undisturbed nature—predominate an area, attempts to harmonize with the surroundings become particularly important. In addition to compatible styles, a designer may also select building materials that blend with the area, stone from local quarries for example. Materials need not duplicate those of nearby buildings, but similarity is often desirable. Ask the architect to present samples, as well as drawings, to show how the proposed materials will look.

A skillful architect will use the size, form, and materials of each part of a building to communicate its character and even its use. For example, while civic buildings traditionally have a grander scale, residential and office buildings are frequently broken into smaller bays or wings to present more humanely scaled facades. The styles of residential, commercial, and industrial buildings are now markedly different, although at one time they were all variations on the home. The neighborhood context will again help determine whether a new office building is large or homey, sleek and modern, or alludes to the local historic character.

Every community should consider addressing such issues with design guidelines. However, important and helpful as they are, design guidelines requiring visual harmony with surrounding architecture will not always prevent an ugly building, and may sometimes prevent an architectural work of real originality. This is an unavoidable flaw in any system that regulates design. Guidelines cannot take the place of careful scrutiny of the architect's drawings, or of imagination. It is up to concerned residents and officials at review meetings to question the ideas behind a beautiful or impressive drawing, or champion a promising idea that may not be well communicated.

STEVE ROSENTHAL

STEVE ROSENTHAL

These modern buildings respond to both historic building types and to their surroundings while maintaining a striking originality.

The harmony of the Back Bay's streets comes partly from the rich variety of detail and subtle variations on what is otherwise a repetition of handsome shapes and materials.

27

THE BUILDING AT STREET LEVEL

A building's ground floor design is critical. Plenty of activity, visual interest, and convenient, inviting entrances attract people to use a building. Windows are always preferable to blank walls at street level. Where windows are not appropriate to the use of the first floor, other kinds of details and decoration should be applied with the walls articulated in an interesting way.

Richness of uses and experiences on the ground floor makes for an environment that passers-by can enjoy, as well. And studies have proven that people enjoy walking, sitting, and shopping where they see other people congregate. Activity breeds more activity, making streets both lively and safe, since crowds deter most kinds of crime (except pickpocketing).

The landscaping and street furnishings adjoining the building all contribute to the animation of the building and street. Interesting paving, trees, benches, and trash containers all make a street more accommodating to pedestrians.

Rowes Wharf in Boston displays distinctive treatments of its base, middle, and top. At the ground level, in addition to shop windows, entry awnings, and trees, its grand portal admits pedestrians to an active public waterfront with a small marina and water taxi service. This mixture of uses, including offices, apartments, and a hotel above, contribute to a constant flow of activity.

THE BUILDING ABOVE STREET LEVEL

Architects generally distinguish the base, midsection, and top of a building. Each part responds to a different purpose and has a specific visual impact. There is a kind of anthropomorphic and gravitational logic to this: feet, body, and head, or rootedness to earth versus pyramidal ascent toward the sky. Historically the base had to be the most solid part of a building since it bore the weight of the structure above. Though modern construction makes this unnecessary, the base should remain the most tactile part of a building. It is the part of the exterior with which people come in contact.

Above the ground stories, the detailing, proportioning and combination of materials, and the ratio of wall to windows become important. At the top, forms which shed snow or rain, overall silhouette, and distant views must be considered. The top of a building seems unimportant when we stand at its base, but visualize a dramatic city skyline and the importance of shaping a building's crown becomes apparent.

The evolution of skylines over several centuries offers interesting lessons. In colonial New England traditions and climate tended to support peaked roofs and tall slender steeples. In mercantile cities impressive cornices dominated as commercial buildings vied for attention on turn-of-the-century main streets. Large twentieth-century cities have sponsored a distinctive skyline of office towers, begun during the 1920s, sometimes referred to as "Cathedrals of Commerce." With the boxiness of mid-twentieth-century office buildings now dominating the skyline of many towns and cities, designers have begun to revive such forms as the clock tower, dormer, and ornamental cornice with which to pierce the sky again and relieve the monotony of the "flat top." Such features add to the distinctiveness of each building, giving a viewer the pleasure of recognizing places and becoming oriented.

Buildings often acknowledge the uniqueness of their location, as well. At corners of a block, at the end of a street or vista, or overlooking an open space, facades, windows, and materials gain elaborateness correlative to the prominence of their setting.

Prominent buildings—those at corners or the ends of streets or vistas—should be treated accordingly. This corner building rises one-and-a-half stories above its neighbors and features a large bay at the turn in the street.

Steeples, towers, and chimneys symbolize the buildings they belong to and the concepts behind them.
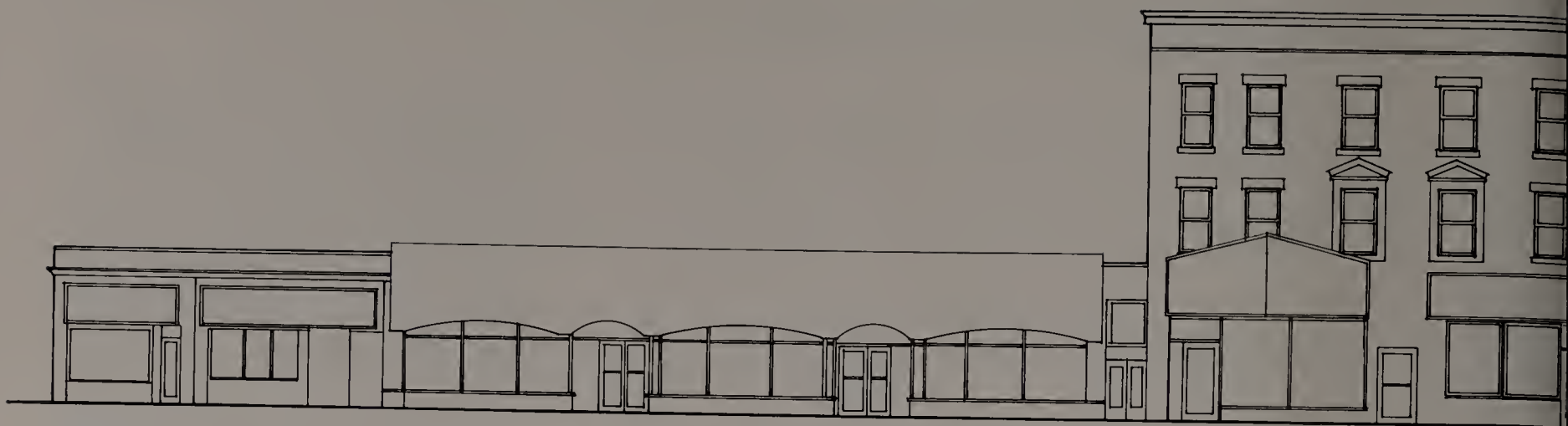
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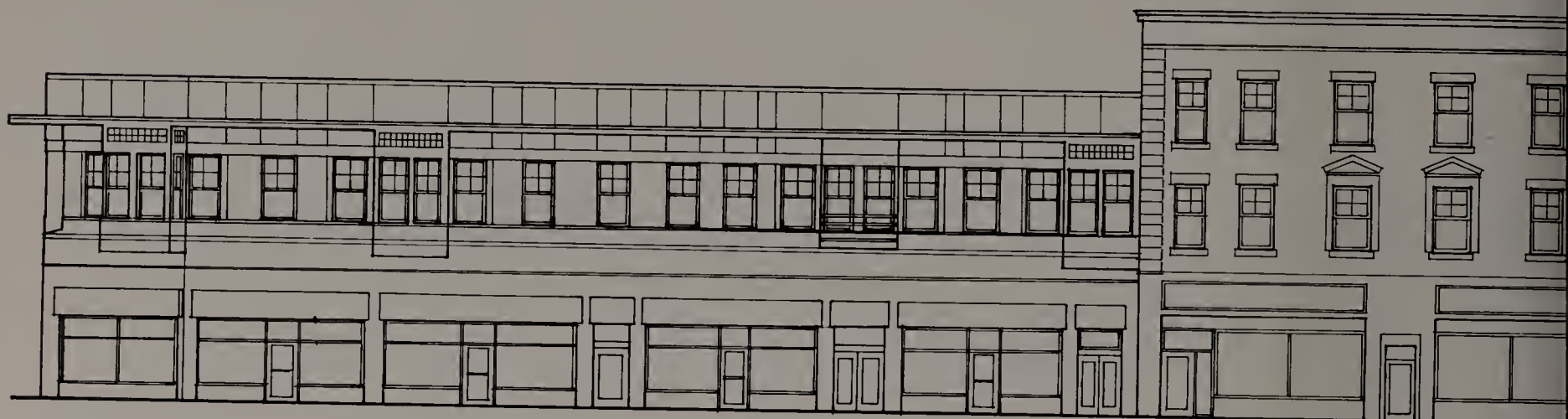
After

T A K I N G

Review preliminary sketches from the designer with the following questions in mind.

◆ Is the building too large or too small to fit in with surrounding buildings without compelling reasons?

◆ Could the building be configured in some way that makes it look smaller or larger to fit in better?

◆ Is the proposed style attractive? Does the building remind you of surrounding architecture? Or a big, boring box? Or an amusement park version of a historic building? Does it have unique characteristics which lend it distinction?

◆ Do the proposed materials for the building blend with the materials of neighboring buildings or do they clash in a jarring way? Ask to see sample building materials displayed as a mockup on the site to decide on their attractiveness, appropriateness, and suitability to the surroundings.

◆ Ask if the materials are durable and of good quality. If you have doubts, ask for examples of local buildings where the same material was used.

◆ Ask to see a model of the building and its surroundings.

◆ When looking at early plans and sketches for a given development, ask the designer how the plan takes advantage of light, views, and circulation patterns.

◆ See if the designer has considered privacy within the building or the privacy of neighbors to the building.

◆ When buildings are constructed close together, remember that the upper floors can be stepped back, away from each other, to allow light into both buildings.

◆ See if pedestrian entrances have been placed conveniently.

◆ Ask the designer about activity on the ground floor. Does the proposed building include shops, banks, exhibit areas, or display windows?

◆ Review the proposed sign and graphics for the building. Are they clear? Does their style and placement complement the architecture?

A C T I O N

◆ See that shops, arcades, lobbies, elevators, and escalators inside a proposed building are planned in conjunction with the entrances—to create a clear path for pedestrians trying to use the building.

◆ Ask the designer or developer to place service access underground or behind buildings at mid-block to avoid blank walls and vacant streets.

◆ Insist, through building codes, that runoff from storms be taken care of on-site as much as possible. This is to ensure that a new development does not increase drainage problems for surrounding areas or overtax municipal storm drains and cause flash floods.

◆ Accommodate pedestrians with landscaping such as street trees to provide shade and beauty, and street furnishings such as benches and trash containers for convenience and comfort.

◆ Ask the architect for elevations of the building, and review them to see if the base, middle, and roofline of the building respond to their particular purposes.

◆ A pedestrian's experience is enriched by detail—sometimes hard to find in the modern world where craftsmanship is no longer commonly found. Paving patterns with interesting materials (instead of concrete or asphalt) ornament surrounding an entrance or major windows, plaques that name a building or discusss a historic event, all enrich the texture of our world.

◆ Let the architect know that you would like an appropriately distinctive roofline for the building. The use of the building or the history of the site sometimes suggests a particular treatment.

◆ Look for a different treatment of windows at the base, middle, and upper sections of the building. Use historic buildings, or any successful existing buildings, as guides to appropriate or attractive window composition.

◆ Ask for windows that can be opened wherever possible.

◆ Finally, few rules always apply. Buildings should be a source of delight, not merely the product of a formula. Allow your intuition and instincts into the decision-making process.

2 STREET SMART

" ...the street [is] a direct link

between the private domain—

home or a place of work—

and the life of the town. "

J. B. JACKSON

𝕊treets provide the powerful images that make up our impression of a place and the means by which we orient ourselves within it. They are our communal living rooms—where civic rituals and activities both great and common take place. For that reason, the design and maintenance of streets must occupy town planners more than the design of individual buildings.

THE ARCHITECTURAL STREET

Memorable cities and towns are characterized by beautiful streets—streets made beautiful by an appealing width, an intriguing curve or dramatic straightness, harmonious building facades or large, gracious trees. Buildings and trees give a street shape as well as their own beauty. They form the walls of what seems to be a large corridor, of which the street is the floor.

A wide residential main street, such as one finds in old New England towns, is often lined with statuesque trees which create lacy walls that are in better proportion to the street than the houses behind them. Trees can also improve the appearance of a street when other types of buildings are set back too far or built too low.

The view along a street is another consideration that should occupy designers. The end of a street, the bend in the street, and the major intersections along it are all points that tend to frame or fill a view. They deserve particularly interesting buildings, monuments, artworks, or dramatic natural features.

The contribution of detailed facades or fences, walls, and hedges cannot be overestimated. Variety in a street's scenery is often part of its charm, though it may be a very subtle variety. The repetition of buildings that are similar but not identical is often part of the charm of historic towns and cities. In a small New England town, the variations may occur among the white clapboard houses arranged around the common. In the gracious older residential sections of larger cities, variations on the brownstone townhouse are easily found.

The street walls must entertain the eye and be comfortable, not oppressive, to walk along. Large developments, in which a single building occupies an entire block, make it difficult to achieve any variety or human scale. Large buildings have suffered in the last few decades from a sometimes elegant but often crude simplicity utterly lacking in detail. Any city with large-scale commercial development can point to at least a few vast, lifeless facades that people cross the street to avoid. Design guidelines can attempt to govern this quality. And when a development consists of more than one building, it may be desirable to employ more than one architect to avoid a

GILES LAROCHE

Washington Street in Boston has remained an animated shopping street for well over two centuries. Although the area's appearance has changed, its character as a lively warren of shops, businesses, and historic landmarks such as the Old South Meeting House (1730) has not.

monotonous grouping. The message that one developer or one company owns a huge tract of the local landscape suggests to individual residents that they are less enfranchised in their own community.

When considering large new developments, be aware of the kind of streets they will create. A shopping mall takes activity away from streets only to simulate a street-like environment in the interior. It creates a no-man's-land of parking, access roads and, if thoughtfully designed, landscaped buffer zones. The common suburban subdivision may also create lifeless streets with its emphasis on large setbacks. Occasionally subdivisions are so skillfully designed, retaining large portions of the natural setting with mature trees, that their charm makes up for their remote, car-oriented quality. Subdivision bylaws governing street layout, setbacks, amenities and services will help.

The Planned Unit Development (PUD) was devised to combat the land-consuming pattern of the typical subdivision. Instead of carving land into equal-size lots for equal-size houses, it offers the advantage of concentrating housing in a smaller area on smaller lots in order to leave larger tracts of common open space. While sometimes successful at preserving open space, the PUD has not often produced better streets.

A recent innovation in the battle against rampant land consumption is to evoke the historic development pattern of the small town in which uses are combined, and buildings remain modest in scale, close together, and close to the street which they help to animate. This pattern calls for many intimate and interconnecting streets instead of a few major arterial streets and residential cul-de-sacs. Remember, a community derives its identity from what can be seen from its streets. A community with lifeless streets has no identity.

> " The main...streets of the town should be wide and adorned with stately buildings; for in this way the visitors will get a more impressive idea of the town and often think that the other parts of it are equally beautiful."
>
> ANDREA PALLADIO
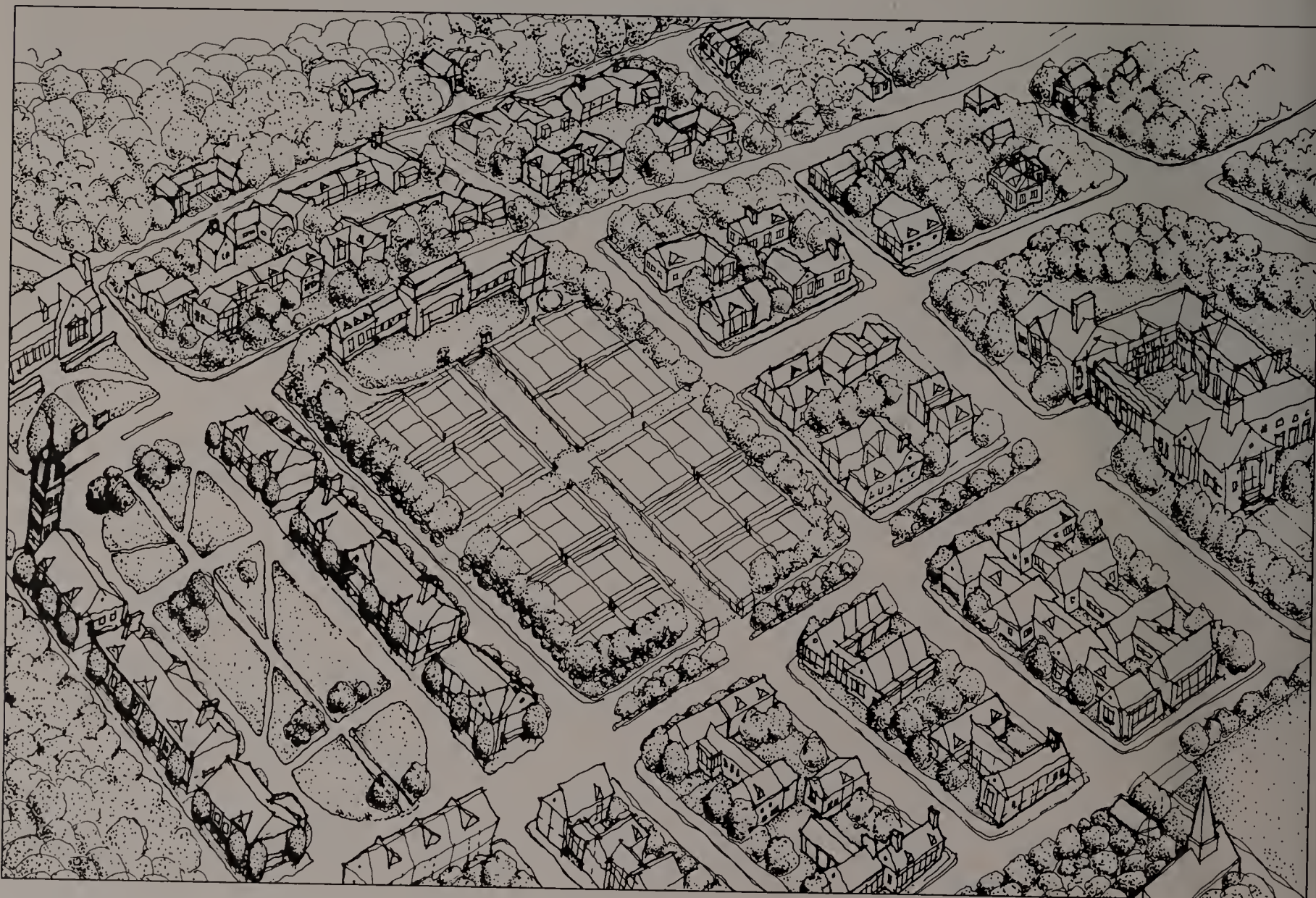
In this bird's eye sketch of the proposed center for a resort community, a grid of streets has been used to organize the community in an understandable way, providing a hierarchy in which public buildings are grouped on more formal streets, while residential streets are smaller, more frequent, and more casual in character.

THE PEDESTRIAN'S STREET

People seek out streets that are stimulating, safe, and comfortable. Thoughtful attention to the pedestrian includes not only street furnishings such as benches and trash receptacles, but safety from cars and crime, and a variety of experiences and things to see. William Halle Whyte, famous for his studies of how public spaces work, has coined the expression, "good uses crowd out bad." People like to be in the crush of the crowd, he maintains, unless they are selling drugs or waiting to rob someone.

The street can showcase the richness of town life with vendors, sidewalk cafes, sidewalk store displays and outdoor markets, exhibits, banners, busy store windows, public art, attractive signs, and graceful trees. The charm of old-fashioned streets derives from this potpourri of activity, which is often hard to come by in contemporary developments.

Occasionally the argument is made that people, spoiled by the convenience of the automobile, do not like to walk. This is offered as an excuse for not providing sidewalks and other pedestrian amenities in subdivisions. However, we all frequently make long, undistinguished treks from a parking space to our destination. We walk more than we realize since most of our walking experiences are so forgettable. Animated streets, waterfront promenades, public gardens, historic districts, and well-designed shopping malls—where people walk the length of a small town—show that people do like to walk if the path is appealing.

Detail makes the street.

People like to sit where they can observe the action.

35

Commercial Core Guidelines and Regulations

1. The Harvard Square Kiosk preserved in its present location.
2. Newsstand relocated on the island.
3. Pedestrian underpass and Church Street subway entrance.
4. Weekend Brattle Street closing.
5. On-street service in the pedestrian space.
6. Brattle Square Subway entrance.
7. Relocate Flagstaff and new fountain as focal elements.
8. Pedestrian axis to Southwest Sector.
9. Pedestrian/service mix.
10. Setback to respect the scale of William Brattle House.

H Historic preservation
L Landmark Conservation
S Service
Sp Service/Pedestrian mix

●●●●● through block connections

------ mean parapet height 40'-50'

streetwall crenelation

retail frontage (max. 40'/retail use)

social niche

design review facade

TAKING ACTION

◆ In towns, subdivisions, and types of suburban development where a continuous row of buildings is inappropriate or infeasible, use trees, hedges, fences, walls, and the occasional facade to define the boundaries of the street and give it a cozier scale and atmosphere. This also defines the private and public realms in a clearer way that affords more privacy to both the home-dweller and the passer-by.

◆ Use design guidelines and review to reject buildings that offer no detail, variety, or human-scale features. Encourage visual richness. If one building must occupy the entire block, insist on interesting features such as bays, entrances, streetfront windows, human-scale detail and decoration, and trees and landscape elements.

◆ Encourage sign systems that let people know where they are, where they're going, and what's available in the buildings around them.

◆ Encourage activity in the street through both public programming and private efforts: farmers' markets, concerts, book fairs, special events, vendors, sidewalk sales, displays, exhibits, and artists' corners. Local arts councils, bands, or performing arts groups may be interested in scheduling performances or exhibits.

◆ Provide street furnishings such as benches, trash cans, and deciduous trees for partial shade in summer.

◆ Create safe street-crossings for pedestrians by extending sidewalks into the parallel parking lane at corners. Also clearly define crosswalks (with pavers that complement local architecture if possible) and establish traffic lights where needed.

◆ Limit curb cuts and make their boundaries clear—especially at parking lots and gas stations—so pedestrians know where they are safe and where to be careful.

CARS AND THE STREET

Pedestrians have shared city streets with roaring vehicles since pre-Roman times, and for almost as long they have sought the protection of sidewalks and crosswalks or crossing-stones such as the ones unearthed at Pompeii. In an effort to reduce congestion in Rome, emperors from Julius Caeser to Hadrian maintained a prohibition against wheeled traffic entering the city during certain hours of the day. The truce between these two modes of transportation has never been easy, but it takes a truce rather than the elimination of one mode in favor of the other.

In modern times, many cities have experimented with car-free pedestrian districts—often in congested, historic shopping areas such as Downtown Crossing in Boston. Downtown Crossing is a uniquely successful example in this genre. Many communities failed with similar projects because they lacked the density and small block size that contributed to success in Boston. Numerous unsuccessful attempts to car-proof large areas, or areas with only a medium swell of foot-traffic, have led years later to the re-introduction of the car in pedestrian streets. Unless an inviting, festive atmosphere prevails—with many attractions in a relatively small area—most people are not willing to give up their cars.

The marriage of pedestrian and automobile environments, however, is enjoying increasing success in residential enclaves and small shopping districts. Environments designed as a series of courtyards, landscaped and paved to slow the car and appeal to pedestrians (that is, with pavers or cobbles instead of an asphalt or concrete surface), have been proven both beautiful and functional.

The car, with its many advantages and disadvantages, is here to stay. The key to keeping it an asset is foresightful planning—keeping in mind that, while a great individual convenience, the car places many constraints on society. With every new building in our communities, we invite more traffic, generating a need for more parking and traffic improvements such as street widening, repaving, traffic signals, and eventually more roads or highways. A community should consider this eventuality with every increment of growth. Public transportation systems, including the imaginative use of smaller systems such as mini-van, shuttle buses, or trolleys should be considered as tools to curb traffic and parking problems.

To manage increasing automobile traffic, sufficient parking and traffic signs and signals must be provided, and the borders between the automobile and pedestrian worlds must be clearly drawn. Parking should be anticipated for every development to avoid overrunning residential neighborhoods or main streets choked by double-parking.

While double-parking is the bane of traffic engineers, curbside parking is a very good idea and should be incorporated whenever possible. Streets on which curbside parking has been eliminated often feel more dangerous, not to mention wider. Without a parking lane a fast-moving vehicle is merely inches from the curb and far more threatening to a pedestrian than a stationary car. A parked car provides a feeling of enclosure to the sidewalk and a sense of safety against the fast-moving cars nearby. Some towns have eliminated curbside parking because of the belief that few benefit from the convenience while many are frustrated by the search for a parking space. However, curbside parking increases parking capacity dramatically and is a tremendous amenity. Just recall how happy you feel when you do find a convenient space.

" After January first next no one shall drive a wagon along the streets of Rome ... after sunrise or before the tenth hour of the day. "
JULIUS CAESAR
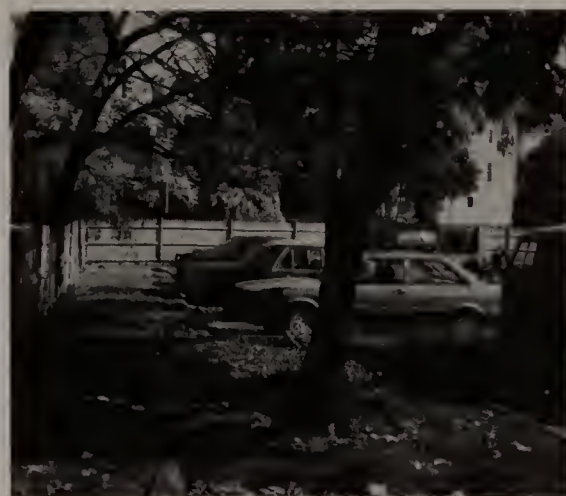
Above, parking made pleasant, central, and screened from the neighborhood. Below, four separate retail establishments —each with its own parking lot, none of which is fully used. While provision of ample parking is critical, so is planning parking to combine facilities, screen and landscape them or provide garages and underground parking as required by traffic volume. See diagrams, p. 39.

A plan of the area known as the Golden Triangle in Framingham shows several regional shopping malls and dozens of smaller businesses, making this one of the largest concentrations of strip development in Massachusetts. The car is more indispensable than ever here, with surface parking covering half of the area in view. A few carefully sited parking garages would have allowed many of these buildings to be clustered together within walking distance. As it is, one must drive from each building to the next. Severe traffic problems on the few arterial streets and continuing pressure for more commercial development are forcing a comprehensive master planning effort to study improvements.

T A K I N G

◆   *Require a traffic impact study from the developer of any new project. Use the traffic study and estimated number of visitors to begin formulating predictions and recommendations for handling increased traffic and parking.*

◆   *Consider a downtown parking shuttle to relieve congestion in a crowded city or town center. The shuttle can pick people at parking garages and make frequent stops in a limited area of the downtown.*

◆   *Providing ample parking helps prevent the congestion that results when drivers are circling in search of non-existent spaces.*

◆   *Use signs to relieve traffic congestion by telling people where they are, where they are going, and how to find the institutions or parking they might be looking for.*

◆   *Conduct a traffic study to ensure that all necessary signs and signals are in place to keep traffic circulation smooth and safe. Review the need for traffic signals whenever traffic volume or patterns change.*

PROBLEMS WITH PARKING

There are two major problems associated with parking. First, more development will require more roads and more parking space—perhaps not immediately, but inescapably. Second, parking demands for most activities vary greatly by day and by season and good planning must accommodate these fluctuations and not leave large parking areas blank and empty for half of every day. There is far more paved area than there are cars to fill it in many communities. The office, the grocery store, the shopping mall, the movie theater, the sports arena, and the bowling alley or tennis club all have spaces waiting for us. Combining uses through innovative zoning can make it easier to combine parking facilities so that places of work, shopping, recreation, and habitation can share parking spaces, and increased public transportation can help eliminate the need for spaces.

The parking and traffic impact of each proposed development must be understood and anticipated—whether a restaurant or a resort. Underground parking or garages are economically feasible for large developments and they should be required. Small and particularly single-use developments should be encouraged to share parking lots to avoid the redundancy of adjoining half-empty lots. Even if a new development offers a welcome economic infusion to a town, negotiate for innovative parking solutions and settle, at the very least, for attractively landscaped, screened lots.

In strip development, each franchise has its own lot.

Curb cuts for parking lots or garages should be made with sensitivity toward existing traffic patterns. Existing thoroughfares could become traffic nightmares if parking entrances and exits onto them are poorly planned. In addition, a new development may, by its location alone, turn a sleepy country road into a crowded highway. Necessary improvements and traffic signals should be implemented ahead of time and residents should understand the potential impact on their neighborhood. Developers should clearly understand the impact, too, and participate in the solutions.

Here, parking has been carefully planned, coordinated and landscaped.

Another possibility is that neighbors to a new development will find themselves without parking near their homes since shoppers or event-attendees may have usurped the local spaces. This scene often unfolds even as a result of gradual growth in an area. Parking needs must therefore be reassessed regularly, independent of a particular new development, although a new development can provide an opportunity to take care of some existing parking problems.

A   C   T   I   O   N

◆ *Provide adequate parking. Delineate "resident only" parking and provide additional parking for visitors to congested areas via garages and lots. These can be good sources of public revenue.*

◆ *Make sure that every new project contributes to parking solutions, either through a general fund or accommodations on site. Require lots to be concealed as much as possible.*

◆ *For parking that serves main street merchants and public buildings, a row of right-angle parking accommodates more cars than parallel parking and does not ruin the streetscape in the way that a true parking lot in front of a shop or institution does. Wide landscaped medians can also provide a row of right-angled parking spaces.*

◆ *Remember that curbside parking in commercial and residential areas is an important way to increase parking capacity, too. The lane of parked cars also serves as a buffer without which fast-moving cars are inches from pedestrians, who also then have more lanes of traffic to cross.*

◆ *Consider a long-range community plan of incentives for combining independent private parking lots or providing centralized municipal parking. This reduces some of the redundancy and wastefulness of separate lots for each use.*

3 GREEN & OPEN SPACES

" There is not a village in America, however badly planned at first, or ill-built afterwards, that may not be redeemed, in a great measure, by the aid of shade trees in the streets, and a little shrubbery in the front yards, and it is never too late or too early to project improvements of this kind. "

ANDREW JACKSON DOWNING

The green and open spaces of a town make a critical difference in its character—in its appearance, healthfulness, and the daily life of its residents. From small seating areas to large parks, open spaces bespeak the level of planning and amenity in a city or town. They protect resources, mitigate pollution, and provide beauty, opportunities for recreation, shelter from traffic, and the message that a place is cared for.

GREEN STREETS , BEAUTIFIED BUILDINGS

Greenery makes a gracious town. Trees, in particular, can beautify streets and buildings, buffer the pedestrian from traffic, mediate between the pedestrian and the larger scale of buildings, and hide less attractive uses such as parking and trash disposal. Their stately forms make them a natural companion to good architecture and a useful screen for ugly buildings.

The geometric planting of these trees along a generous green mall between residential streets creates the architectural effect of a canopied, open-air concourse filled with light and shadow and the movement of trees.

While the broad, tree-lined avenue is often associated with its European ideal, such as the Parisian boulevards designed by Baron Haussmann, the tree-lined main street or residential "Elm Street" is a uniquely American prototype. As villages grew to towns and towns to cities in nineteenth-century America, the need to civilize the raw settlement gave rise to Beautification Committees whose efforts transformed the settled landscape. The dramatic impact of their tree-planting campaigns—along streets and around public open spaces and buildings—can hardly be appreciated today since Dutch Elm Disease claimed many stunning double and quadruple rows of elm trees planted along our older streets, avenues, and parks. But the impact was magnificent indeed and provides a lesson for us today. Restoring the rituals that used to commemorate Arbor Day, when entire communities used to commit a day to the celebration and planting of trees, would benefit most of our modern neighborhoods and planning efforts.

A public park in Westfield, New Jersey

Such infectious enthusiasm for improving the public realm resulted in towns and cities that grew more beautiful under the proud stewardship of their residents. Extensive planting schemes, in addition to conveying the care and investment of residents, help to unify the different streets or districts of a town with a common visual element: the tree. Trees can be used to identify the main streets, making a town easier to use and understand. They can accentuate the main entrance to a public building, hide an ugly facade, or add life to a boring one. They also create their own microclimate, cooler and moister than the built surroundings, and more oxygen-rich. And although a small number of trees cannot fight heavy pollution, generous numbers remove some carbon dioxide from the air, and improve air circulation if strategically planted. Their purchase and maintenance should be part of every project budget.

Shrubs and flowers have a different use. Their small scale and association with the residential landscape limits their usefulness in cities and towns. They tend to provide decoration rather than making an architectural impact in the way that a row or a bosk or even a pair of trees can. They can add considerable charm when used appropriately as in storefront windowboxes, monument settings or, occasionally, foundation plantings.

Ground covers, grass, and vines, on the other hand, can add interesting textures to the ground or building planes in a town or city. Ground covers can be used to very rich effect in raised planters, as lawns, or interspersed with paving blocks in decorative patterns. Ground covers require less maintenance than grass and various species may be selected to meet almost any conditions: dry, damp, sunny, or shady. Vines also come in some durable varieties that can ornament a facade or fence.

The loss of farmland threatens the character and local ecology of many New England communities. The Massachusetts Department of Food and Agriculture has devised programs to preserve farmland by purchasing development rights to farms. See "Finding Help," p.75.

The map shows labels: BIKE PATH, PLAYFIELD, GARDENS, NEIGHBORHOOD PARK, OUTDOOR READING ROOM, CHURCH, PUBLIC LIBRARY, AMPHITHEATER, BIKE PATH, TENNIS, VOLLEYBALL, UNDERGROUND PARKING, GREEN BUFFER, RESIDENT PARKING, SCHOOLYARD, SITTING AREA, TRANSPORTATION CORRIDOR, EXHIBITION COURT, LIGHT INDUSTRIAL, SPRAY POOL, NEIGHBORHOOD PARK, SCHOOL, TOT LOT, DAY CARE, COMMUNITY GARDENS, SENIORS CONGREGATE HOUSING, CONSERVATION LAND, GARDENS, SITTING, OFFICE PARK, UNDERGROUND PARKING, GREEN BUFFER, RESIDENT PARKING, NEW HOUSING, TOT LOT, DAY CARE, GAME COURT, FOUNTAIN, GARDENS, NEW HOUSING, HORSESHOE COURT, PICNIC AREA, OBSERVATION TOWER, BICYCLE PARKING, RETAIL, CAFE, FOUNTAIN, PEDESTRIAN STREET, T STATION, BIKE PATH, CAFE, RETAIL

0 50 100   200 FEET

T A K I N G   A C T I O N

◆ Create a master plan for the community showing where certain types of landscaping are needed, such as planting of street trees, renovation of parks, creation of lawns or foundation plantings, improvement and camouflaging of parking lots. Delineate areas of the downtown that you would like to harmonize in some way. A good landscape architect can be very helpful in this endeavor.

◆ Current wisdom dictates that we beware the monoculture. Although one type of tree planted in repetition on several streets looks very striking, the blights that claimed the chestnut and elm, and now threaten the dogwood in the Northeast, have made clear the importance of planting more than one species of tree over a large area.

◆ Require consideration and a budget for the landscape in all projects. Where difficult conditions suggest an alternative to a green treatment of the streetscape, the developer can contribute to creation of a small plaza or pocket park, or to a general park fund. Require that maintenance be included in the budget for the proposed improvements. Do not allow last-minute cuts in the landscaping budget when financing gets tight toward project completion.

Parks and open spaces are matters of both design and planning. They should be beautiful, and they should contribute to the beauty of the place, but they should also be used in the larger planning context of a community to achieve additional benefits. Travelers from abroad often marvel at how open American cities appear. Most of this openness is the result of private yards and lawns, parking lots, wide streets, and vacant land. A city or town needs not just open space, but useful, pleasurable, and interconnected open spaces and conservation areas in order to receive real benefits.

Parks and park systems can be used to protect drinking water supplies and endangered species, preserve land, views, and town character, and even improve air circulation and quality in smog-ridden downtowns. Parks relieve congestion, provide gathering places, and offer recreational opportunities for every resident: a bench from which the elderly resident can enjoy nature and come into contact with other people; a place to eat lunch for the office worker; a setting for the games of small children or the organized recreation of older ones. They should be planned with these populations in mind—near housing for the elderly, office buildings, and even more generously in residential neighborhoods.

Preserving land protects municipal resources both directly and indirectly. A park or preserve may protect an aquifer or a plant or animal species and, by saving land from development, reduces demands on the community's resources and services in a general way. Parks may also occupy lands unsuitable for development because of soils that make building or waste disposal difficult. In addition, connecting green spaces gives flora and fauna a better chance of survival. Most plants do better in the slightly more humid, sheltered atmosphere provided by other plants, while animals are better able to find shelter and food when they are not limited to tiny areas of safe haven.

The word park applies to many types of open spaces: a small, formal design, a large natural preserve such as our national and state parks, or the grounds or hunting preserves of an estate.

When designing open spaces, keep in mind that a smaller park of the type that we are most often able to provide in our cities and towns today, should respond to its surroundings. Formal parks with relatively formal geometries (either modern or classical) look better in cities and large towns. They should be designed in a style sympathetic to the period of the surrounding architecture and include complementary materials and details. Remember that trees and fences can be used

" We want a ground to which people may stroll for an hour, seeing, hearing, and feeling nothing of the bustle and jar of the streets...We want the greatest possible contrast with the streets and shops and rooms of the town [and] those conditions which compel us to walk circumspectly, watchfully, jealously, which compel us to look closely upon others without sympathy. Practically, what we most want is a simple, broad, open space of clean greensward. "

FREDERICK LAW OLMSTED

The extensive and beautifully landscaped grounds of Naumkeag, once a private estate, near Stockbridge, Massachusetts, have been opened to the public through the stewardship of the Trustees of Reservations. Non-profit organizations and land trusts can be instrumental in the planning of local open space systems. They can help purchase land for conservation or public enjoyment, or hold vulnerable land while a state or local government musters the necessary funds to buy it.

along the street edge of a park to maintain the wall made by building facades. Fences and other features should either reflect or complement the surrounding architecture. In a very large city park, these formal borders may give way to a more pastoral interior.

Less formal surroundings may call for a less formal-looking park, with less structure, less paving, fewer building materials, and a more natural feel. Take care not to over-design either a residential park or a small formal park. A small park may be designed with subtle richness but it should never be cluttered with too many objects (such as memorials) or too many different shapes. For a rural or small town center, the beautiful example of the village green or common provides the classic example of simple, dignified geometries appropriate to a community center, and which can be developed either formally or informally.

Decorative paving adds life to this small open space.
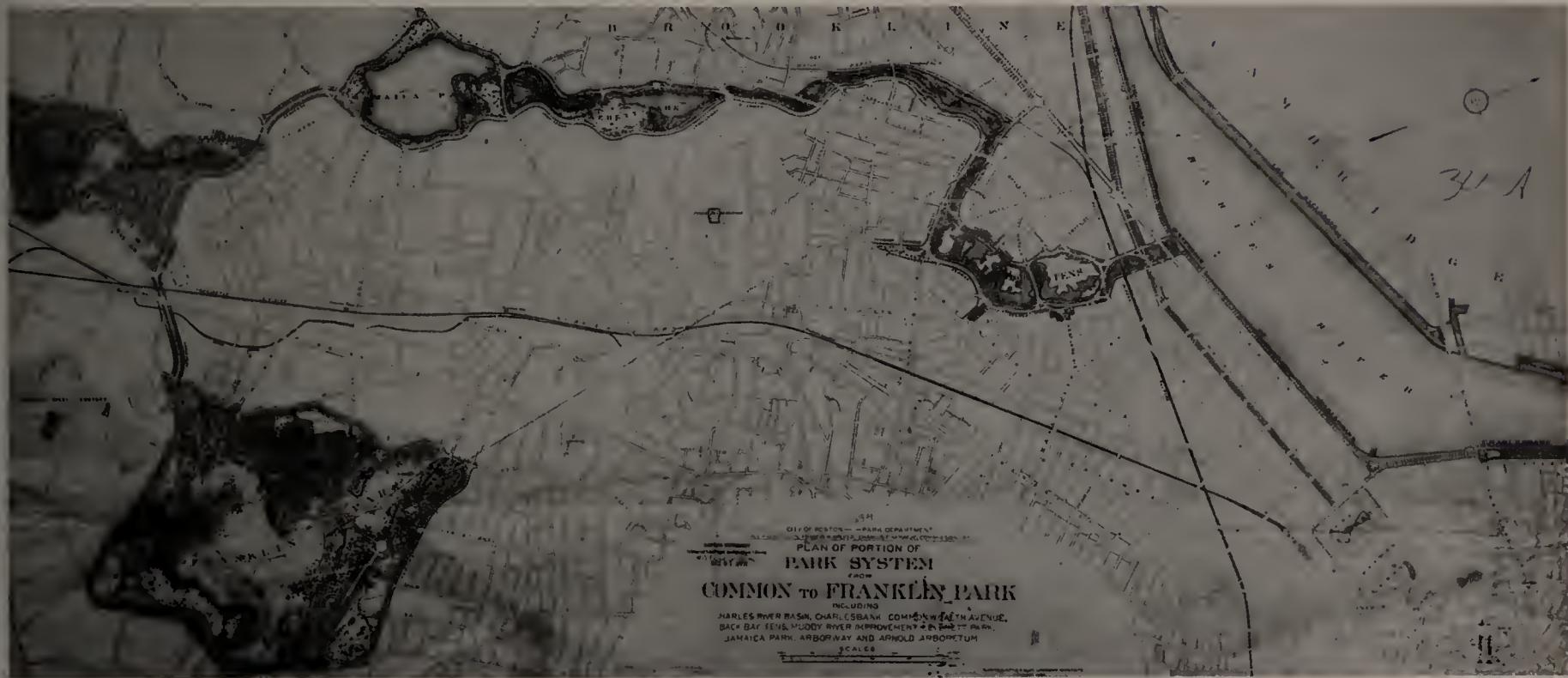
Frederick Law Olmsted's century-old plan of the Emerald Necklace shows how early the necessity of threading green space through cities and towns became apparent. Boston was one of many American cities engaged in ambitious programs of park-making at the end of the last century. Parks were popularized as both a physical and spiritual antidote to rampant town growth and industrialization.

TAKING ACTION

◆ *Create a map showing natural resources (such as aquifers or views) that need to be protected and neighborhoods that need recreation facilities or open spaces.*

◆ *On the same map, or an overlay of the same size, plot existing open spaces from tot lots to major conservation tracts. Draw in potential open spaces where the need for recreation or resource protection appears. Draw desirable and feasible connections between them—connections designed for both pedestrian enjoyment and protection of resources.*

◆ *Write building and zoning codes that preserve open space and require that developers do as well. An open-space-incentive plan can be implemented which offers developers exemptions from certain zoning codes in exchange for preserving open space.*

◆ *See the "Finding Help" section for how-to manuals, regional planning agencies, and sources of student interns that can be helpful in this process. Or hire a good landscape architect. (See Part II, Section 1, "Selecting a Designer.")*

4 PUBLIC ART & PLACE-MAKING

> " *Those who have abandoned*
> *[the] quest for beauty have*
> *thrown away the most important*
> *tool for arousing interest in city*
> *planning. They have denied a*
> *great tradition and although they*
> *do not know it, they are helpless*
> *and their hands are tied without*
> *the aid and power of art.*"
>
> CHRISTOPHER TUNNARD

The charming town or urbane city has a dimension that others lack. It may be the beauty of the indigenous architecture, the richness of crafted details, a profusion of art, an unusual pattern of parks and open spaces, gracious boulevards, a clear simple layout, or prominent institutions. These elements express something about the spirit of a place and the humanity of its founders, builders, inhabitants, and artists. Public art and well-designed amenities are often considered details in the modern public budget, but they add immeasurable richness and civility to any civic environment.

The official seal of Lowell, Massachusetts, which reveals the role of art in expressing the human spirit in all settings and walks of life.

ART IN THE PUBLIC REALM

Americans who visit Europe are frequently struck by the profusion of art and craft around medieval squares, in Renaissance churches and cathedrals, ancient universities, and other antiquities. The deep spirituality bespoken by these lofty labors is no longer a force that shapes our environment. Modern American cities reflect more of a preoccupation with commerce and individual identity, but art is still a vital expression of our culture's deeper convictions.

Americans, with our traditions of democracy and capitalism, have different shrines in the landscape, such as the white meeting house or McDonald's arches, and a unique tradition of public art that is actually chosen by the public. The American public has the power to commission art, appropriate budgets for the fine arts, create design guidelines and review processes, and require the cooperation of public and private developers. Successful arts programs are now in place in most major American cities and many states require that approximately one percent of public construction budgets be spent on public art.

Art in the public realm is often thought-provoking and sometimes controversial. Tastes differ widely. Perceptions of what is appropriate for a particular setting differ widely. And the expenditure of public funds on art is not always fully supported by the public. Successful arts programs are usually based on planning studies and tailored to the history, population, and building patterns of a particular community. Such studies establish clear goals for an art program in a given community, and offer guidelines for setting it up. Public art consultants, as well as the artists and designers for public projects, can help residents explore different solutions and precedents. Simply looking around your community may reveal examples of art that could inspire the direction for a new arts program.

The New England Aquarium in Boston.

Fountain at Chestnut Park in Philadelphia.

This commemorative fountain near the National Park headquarters in Lowell is one of many sculptures and artworks placed throughout the city through Lowell's strong public arts program.

Art is used in the public realm in many ways. It may be used to create a place or viewed as an object. It may be temporary or permanent, with many different qualities. It may be contemplative or thought-provoking; abstract or representational; participatory or not. Art can also serve as a beacon or reference point within the town or city, or can be made on a more intimate scale. It engenders respect for a place, deters vandals, and contributes to a broadening of perceptions about the physical environment—particularly to the broadening of children's education about art.

Traditional artisanry includes objects such as wrought iron fountains, engraved stone or bronze plaques, and custom-designed street furnishings such as benches, lampposts, and trash receptacles. Similarly, art can be used as decoration—statuary or other embellishments. Art may be colloquial. The wall with a mural painted by local schoolchildren is an example of this. Art may be inspired by, and installed for, a special occasion or festival. Banners, ice sculptures, and performance art are examples of such festive works. But art does not always require a specific purpose or establish a tangible meaning nor does it need to look pleasing or beautiful in a traditional way. Sometimes it simply expresses the human spirit, or allows that spirit to soar. Public art which is done for the sake of artistic expression, not decoration, demands more interpretive effort on the part of the viewer. Such art works may stretch our imaginations at first glance, but over time they may become part of our vocabulary and, ultimately, our heritage.

An arts program with well-considered guidelines tends to ensure greater success for installations of public art—partly by establishing guidelines for choosing sites, and by including art early in the planning process. The placement of artists on the local planning or zoning boards also helps to facilitate the choice of sites and generate ideas for public art early in the planning stages of a construction project. Art added to a site as an afterthought is often, though not always, less successful. When a strong artistic expression is sought, the art must be considered first, and the site should be designed to accommodate it.

Arts programs and attention to the arts may also result in a greater integration of artists into all aspects of the community. Artists are now becoming part of a project's design team from the earliest stages—assuring a better integration of art and site and reducing the project budget by helping to envision circulation patterns, seating, performance areas, lighting, plumbing, and materials that enhance the artwork and that would have to be altered later if the art was an afterthought. Artists may suggest logical sites for works of art or performance spaces and help review other types of design. Artists may also make a great contribution to the future of a place by working with local schoolchildren or other groups.

Communities do not have to pay for every piece of art themselves. In addition to taking advantage of the one-percent-for-arts rule in state and federal construction projects, they may ask developers and local institutions to provide art or to contribute toward a local art fund.

A park in Kent, Washington

A partial List of art works in Harvard Square, Cambridge

A Two cannons abandoned by the British during their
   withdrawal from Boston.

B Two stone markers in memory of Polish military heroes
   of the Revolutionary War.

C Statue of General Charles Russell Lowell.

D Washington Gate, where General Washington took
   command of the American Army on July 3, 1775.

E A series of bronze horseshoes tracing the path taken
   by William Dawes to Lexington on April 19, 1775.

F A series of exhibit boards on Cambridge History.

G Statue of Charles Sumner.

H "Omphalos," a statue by Dimitri Hadzi.

I The kiosk.

J Winthrop Square Park and commemorative sculpture.

TAKING ACTION

◆ Study the possibility of an arts program with goals tailored to your community. Does the community want to support local artists? Or encourage national involvement? Does it want a more vibrant image? Does it want to commemorate aspects of its history?

◆ Include local artists on the planning boards, design review panels, and project design teams, in order to get the earliest possible suggestions on how art might fit into the project, site, and community.

◆ Consider hiring a public art consultant to work with the community.

◆ When contemplating the addition of art to a new development, consider its role: centerpiece or decoration?

◆ Look for examples of art locally. You may be surprised at its frequency and subliminal delights.

◆ Use regional resources for research—library slide collections, artists or art experts, local university professors or graduate students—to help frame the choices for the municipality.

◆ In selecting art for public developments, appoint a knowledgeable panel—one sympathetic to the goals of the community—to review a field of artists and choose the appropriate one for the commission.

◆ Purchasing a finished work is less common in the public realm. It is more reliable in one way, since the final product is then guaranteed, but it should still be selected early in the design of the site, which can then be designed to display it.

◆ Commissioning work, though never entirely predictable, guarantees an artistic expression uniquely tailored to a particular site. It also supports local artists by providing the opportunity for competitions or other artist-selection processes.

The familiar clutter of commercial and traffic signs. Below, a manhole cover designed for the City of Seattle which orients urban pedestrians to Puget Sound.

Residents and visitors alike should be able to find the streets, institutions, shops, and parking garages they seek when they drive or walk in town. This makes for better-managed traffic and return visits by people who have had pleasant experiences as they explore the community. On a subliminal level, it lets residents know that their government is thoughtful and their taxes are well-spent.

People use many clues to orient themselves. First, they rely on understandable street and building patterns. Public art, monuments, buildings, parks, and landscape treatments can all be used to create points of reference and give different parts of town a unique identity. These distinguishing features are easy for people to remember and orient themselves by. Similarly, buildings with unusual setbacks, hidden behind other buildings, set behind parking lots, or with hard-to-find entrances are frustrating to locate and use, as are identical streets without personality.

Sign systems and creative graphics can be used to assist people further. Although they have a large impact, signs are often considered an afterthought and neglected in design planning. Consider signs along with any new development, since they are most effective when composed along with architectural elements. Signs are also a priority for improving existing neighborhoods and transportation corridors where institutions, parking, or traffic patterns are not clearly marked.

Signs are an inevitable requirement of communicating information—to the pedestrian, driver, visitor or resident. Yet despite the profusion of signs we often see along commercial streets, helpful, well-designed sign systems are a rarity, as we can all attest from our experiences of getting lost, circling aimlessly in a car or asking people for directions.

This successful sign identifies the institution, the nearest entrance, and the availability of parking. A less thoughtful approach might have used three signs to convey the same information.
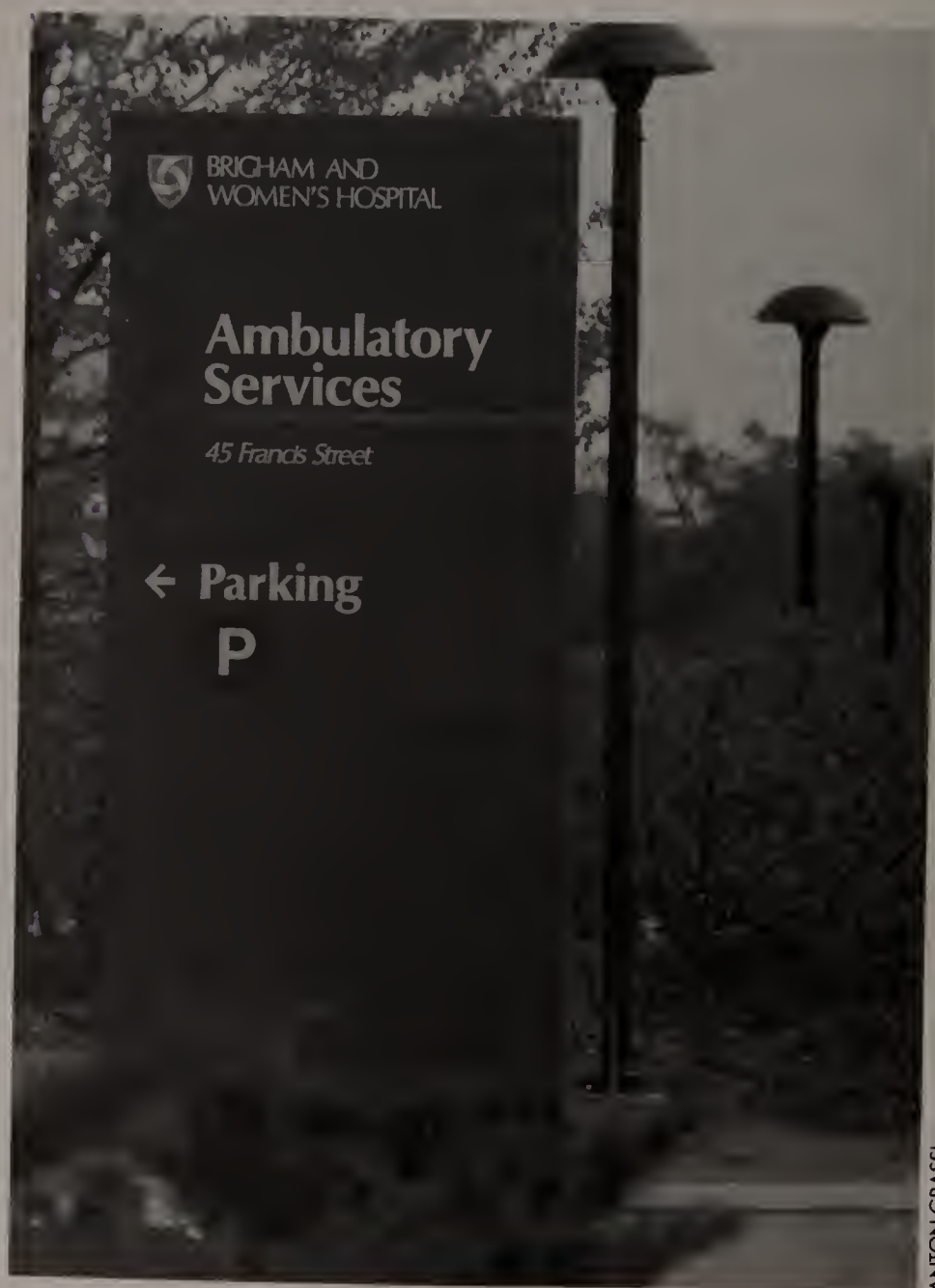
Sign systems must be implemented carefully, since a profusion of signs is as confusing as a lack of them. The careful design and implementation of traffic signs, and all public signs, always improve the appearance of a street. Signs must be seen in a clear hierarchy so that the viewer can distinguish public from private, important from incidental.

A community should consider guidelines for both public and private sign systems. Public sign systems will deal with traffic directions, regulatory information, and locating institutions and public facilities. Private signs, such as those on shops, can be controlled through design guidelines. Since these signs are often imaginative art forms in themselves, control should not be too rigid. For any sign systems or sign guidelines, an outside consultant who designs sign graphics may be helpful. Professionally, this discipline is known as environmental graphic design. These designers have a wealth of knowledge concerning the typefaces, colors, sizes, symbols, locations, and materials that make signs easiest to see and understand. Thoughtful, creative sign design results in fewer, more attractive, easier-to-read signs.

Bus Stop
No Standing →

2 am - 6 am
←→
1 Hour Limit
8 am - 7 pm →

Environmental graphic designers can collaborate with traffic consultants to tell a community how to make a dangerous intersection work better. If the community has traffic officials who can evaluate the needs of the current system, beginning this evaluation is probably the best first step. Otherwise, an outside planner or traffic expert may be useful in evaluating community needs.

Symbol Size: 12"

10°

Effective viewing distance
not more than 150 feet.

Effective viewing distance
not less than 20 feet.
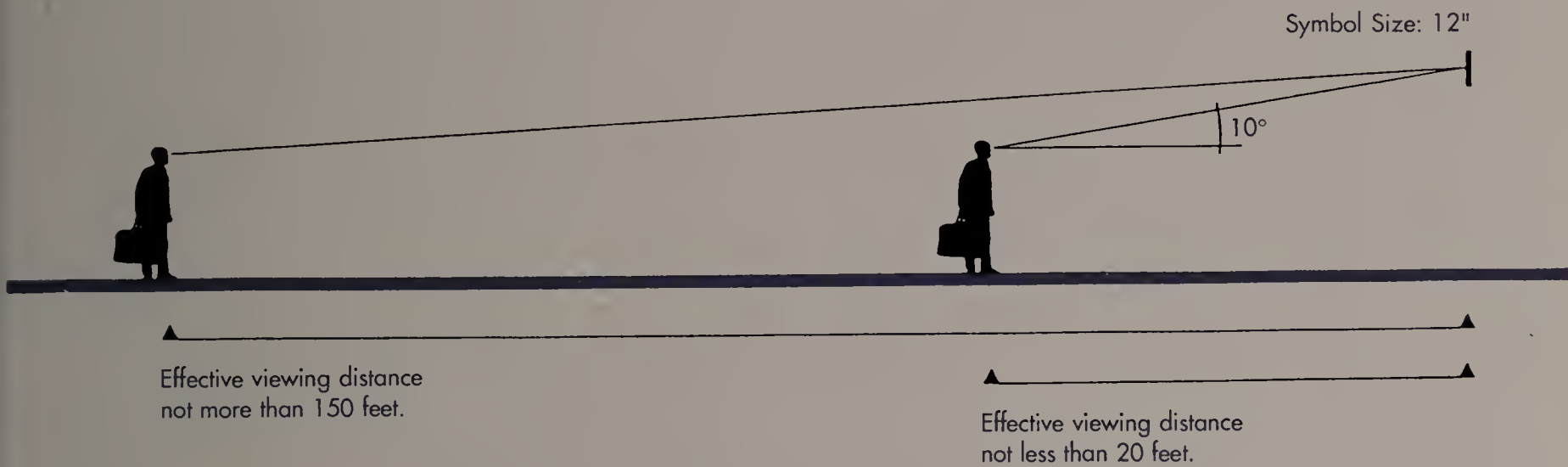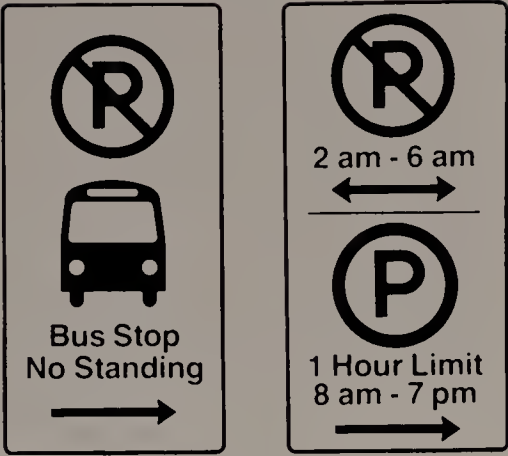
TAKING ACTION

◆ *Signs should suit the neighborhood and nearby architecture. They may look historic or modern and playful. When reviewing proposed sign systems, look for new signs to be an artful addition to the street scene.*

◆ *Certain symbols, such as "P" for parking, are used nationwide. These should be honored when you create a new sign system, so the signs will be understood by the greatest number of people.*

◆ *Ask the sponsors of any plan for a new development or rehabilitation to give thought to sign and graphic systems that will help orient people.*

◆ *Hire an environmental graphic designer to help plan and design a sign system or guidelines. Contact the Society of Environmental Graphic Designers, in Cambridge, Massachusetts, (617) 577-8225, for referrals or additional information.*

5 BEHIND THE SCENES

" Marco Polo describes a bridge,

stone by stone. 'But which is the

stone that supports the bridge?'

Kublai Khan asks. 'The bridge

is not supported by one stone or

another,' Marco answers, 'but

by the line of the arch that they

form.' Kublai Khan remains

silent, reflecting. Then he adds:

'Why do you speak to me of the

stones? It is only the arch that

matters to me.' Polo answers:

'Without stones there is no arch.'"

ITALO CALVINO

The success of a design may depend on many factors that are either hard to find or invisible in the final drawings. Will it serve the community? Will it serve the handicapped? Will it overtax the local infrastructure? Will it be well-maintained? The answers to these questions will influence not only the success of the project, but the health of the community as well.

THE IMPORTANT INFRASTRUCTURE

Any development changes more than the appearance of a community. It makes demands on the local infrastructure that the municipality may or may not be prepared to meet. It increases the volume of traffic, increasing wear on the roads and demand for parking, and often requires upgrading of surrounding roads. It increases demands on the community's sewage disposal system, solid waste disposal systems, and water supply. These demands may begin with the the groundbreaking— when construction practices can pollute local waterways—and continue for decades with traffic and parking problems or a water shortage. Such demands affect both the community's pocketbook and natural resources.

Historically, bridges, parkways, toll roads, parks, canals and even pumping stations and water works have been among the most attractive and prominent physical structures in American towns. It is as unfortunate as it is short-sighted that such facilities are today twice diminished: inadequate budgets for construction are followed by inadequate maintenance budgets.

BETSY CULLEN

The financial burden of a growing infrastructure is fairly obvious. A growing population and increased development means more roads and sidewalks, more parking facilities, more storm drainage and sewer systems, more water and utility lines, more schools, school buses, crosswalks, and traffic controls, more recreational facilities, and increasing maintenance budgets for all new facilities. Some of these facilities can themselves become sources of beauty and town pride, but not if their construction and maintenance budgets are always minimal afterthoughts or entirely overlooked.

A storm drain at Gasworks Park in Seattle.

SUZETTE BARBIER

The effects of development on the natural environment, and the limited capacity of that environment to absorb change, are less obvious. The death of water systems around New England brings these issues increasingly to our attention. New building affects local water systems in several ways. During construction, silt, pollutants from demolished building materials, or nitrogen from dead vegetation usually runs into the nearest water system. Silt clogs streams and small rivers and fills ponds, changing the nature of the water system and killing existing plant and animal life. Large quantities of cut vegetation release enormous amounts of nitrogen which again make waterways uninhabitable for their native organisms. Clouds of algae eventually indicate the illness of the water system.

Another danger to local water systems is storm runoff. The earth naturally absorbs rainwater in a process called percolation. When large areas of land are paved, the water runs off through the storm drainage system instead of percolating into the ground. It floods the nearby streams or rivers into which the storm drains empty, again disrupting the natural aquatic habitat, destroying its delicate systems and many interdependent inhabitants.

Finally, there are the better-known hazards to the local water supply. The simplest scenario is a greater demand for water than the local supply can meet. An even more insidious threat occurs when sewage or industrial waste disposal is not carefully planned, or when waste from growing development simply exceeds the land's capacity to absorb it. The water supply may then become contaminated, as has already happened in several Massachusetts communities.

The new subway station in Malden showing pedestrian bridges and a tower.

ELEVATION
NORTH

T A K I N G

◆ *Permitting procedures should make clear requirements of developers to share the increased infrastructure burden. The developer may be asked to lay pipes, set aside open space, or contribute financially. When a large residential subdivision is built, the developer may even be expected to share some responsibility for the increased burden on local schools.*

◆ *Require the designer and developer to explain the development's impact in terms of the systems described above. Get it in writing and pictures.*

◆ *Prohibit clearcutting of wooded sites. Require that existing vegetation be preserved to the greatest extent possible, and that dead vegetation be hauled off the site.*

◆ *Implement building codes that dictate permissible levels of storm runoff. Building codes should include requirements and methods for disposing of stormwater on-site.*

◆ *Members of planning boards, zoning boards, boards of health, and other board members and officials should familiarize themselves with state and federal requirements for industrial waste disposal. They should consider implementing their own stringent requirements as well.*

◆ *The Board of Health should maintain strict requirements for testing for septic systems or connection to the local sewage disposal system.*

◆ *Know the capacity of your local water system. Zone and plan not to exceed it. A map of water resources, including wetlands, can be compared to a zoning map, or laid over it, to see whether zoning has been used to protect resources.*

◆ *Be sure that the project complies with the requirements of the Massachusetts Environmental Policy Act (MEPA), and that Environmental Impact Reports are filed as required with the MEPA office. Call (617) 727-5830 for more information.*

ACCOMMODATING SPECIAL NEEDS

It takes some imagination for an able-bodied person to understand the frustrations of the physically challenged in dealing with the urban environment. Each group has different concerns, and organizations for those with disabilities are usually the best source of information for planners trying to meet their needs.

This park entrance, ramped to serve disabled citizens, became the occasion for an elaborate work of public art. The requirements of handicapped persons need not always come as an afterthought.

ART ON FILE

Of course, state codes mandate the removal of certain barriers for those in wheelchairs and on crutches. However, people with visual, hearing, or speech impairments also suffer frustrations in trying to use public streets, buildings, and parks, because they are not privy to all of the information systems that guide the average user. Persons who are blind cannot read street names or building addresses or find elevators, information booths, or directories once inside a building. Persons with impaired hearing or speech can ask directions or seek help from information officers in a building lobby or at a park entrance through written communication, but they cannot call ahead and ask what hours a place is open, or ask other questions about how to find the place or how to conduct their business.

While "barrier free" environments for all people with disabilities remain an elusive ideal, foresight in the planning stages will make it easier to meet this goal with generosity, instead of the minimum required, and with artistic flair.

Sidewalk ramps for handicapped persons are found in more or less generous forms. State codes now require less steep ramps but these requirements should still be considered minimal.

A C T I O N

◆ Call the Massachusetts Office of Handicapped Affairs in Boston, (617) 727-7440, for advice or technical assistance.

◆ Listen to the suggestions of the disabled members of your community. Consider what is practical for the size of your community and the development in question.

◆ Teletype devices are an important means of communication for the deaf. This is, in fact, one of the only ways deaf people can participate in the information-gathering process that allows most of us to find out when a store or public park closes, purchase tickets to events, or dispute a utility bill. The community may require very large new developments to include such a device at its information office, or contribute to the staffing of a public teletype device in a municipal office or chamber of commerce. An information officer who speaks sign language is a wonderful amenity for hearing- or speech-impaired patrons, too.

◆ Be sure the plans for any project, and contractors, all adhere to the most up-to-date state codes for wheelchair ramps and access. These codes were revised to create more generous ramps in the 1980s.

◆ Consider sloping the entire sidewalk corner down to street grade, instead of just a wheelchair ramp. It looks better anyway, and it makes travel easier for those in a wheelchairs as well as those with baby strollers, two-wheeled laundry and grocery carts, or canes or walkers.

◆ Water fountains and restrooms should also be up to code, as should elevators. Elevators can be made easier for blind people to use via auditory signals. In addition, benches and seating should be generously provided and well spaced to assist those with difficulty walking, along with everybody else.

PROGRAMMING FOR SUCCESS

Poster for the 1989 Cambridge River Festival. The festival is shown below at full flood.

To design well merely takes talent, an old professor quoted Le Corbusier as saying, but to program well takes genius. Whether the quote is accurate or not, in recent decades, planners and designers have become more imaginative about programming festivity and activity into parks and buildings. The orchestration of special events gives a place a unique identity and special animation and vibrance.

Events can help people get to know a place and become more comfortable using it. They enliven a place and help it attract customers to shops and businesses. Imaginative programming can enrich an environment in a way that built structures alone cannot. Farmers' markets in parking lots, vendors on the street, paddleboats on the lake, sound-and-light shows on building facades: when people appear to be having fun, others always show up to investigate. These are also ways to convert single-use environments to serve the community with greater variety.

Scheduled events can be used to improve business for local merchants and restaurateurs, to attract new residents, to crowd out undesirable uses, or stabilize or improve a depressed neighborhood. Spaces for political debates, concerts, movies, book sales, fairs, or public activities, should be built in—and public restrooms should accompany them wherever possible. These events draw people to congregate for truly social activities. Too often in modern development, the commercial—and highly individual—activity of shopping is the only activity planned for, and while we are all drawn to the crowds at the mall or the festival marketplaces such as Faneuil Hall, we can only eat so many croissants and acquire so many trinkets.

TAKING ACTION

◆ *Your local planner should work with the designers of any new development to help them understand what activities would be appropriate to the community.*

◆ *Ask the designer for ideas for public events and uses for the development he or she is designing.*

◆ *Include local arts and cultural groups in the planning process at early stages, in order to benefit from their ideas and contributed talents.*

◆ *The local planner or a community group can plan events and festivals for existing facilities.*

◆ *Don't forget to ask developers and designers to provide public restrooms and water fountains.*

MAINTAINING THE PUBLIC REALM

The vast investments of our federal, state, and local governments in public improvements are frequently wasted through lack of realistic maintenance plans and budgets. This critical element of a successful project should be considered at the earliest planning stages.

Recognition of this problem has increased lately and some inventive new solutions have been offered. For public open spaces, the notion of a maintenance trust, sponsored in part by the owner (city or state) and partly by abutters, is gaining popularity as localities find themselves increasingly unable to rise to the task.

Whatever the development—a shopping mall, a commercial block, an office building or, most important, a public space or institution—it should include plans and resources for maintaining the public realm.

TAKING
ACTION

◆ *Require that maintenance costs be included in the project budget for every new development or public improvement.*

◆ *Ask to see detailed maintenance budgets for any development proposal.*

◆ *When maintenance requirements strain the local budget, investigate joint trusts between the private and public sectors.*

◆ *Remember the impact of fresh paint or cleaning on a building.*

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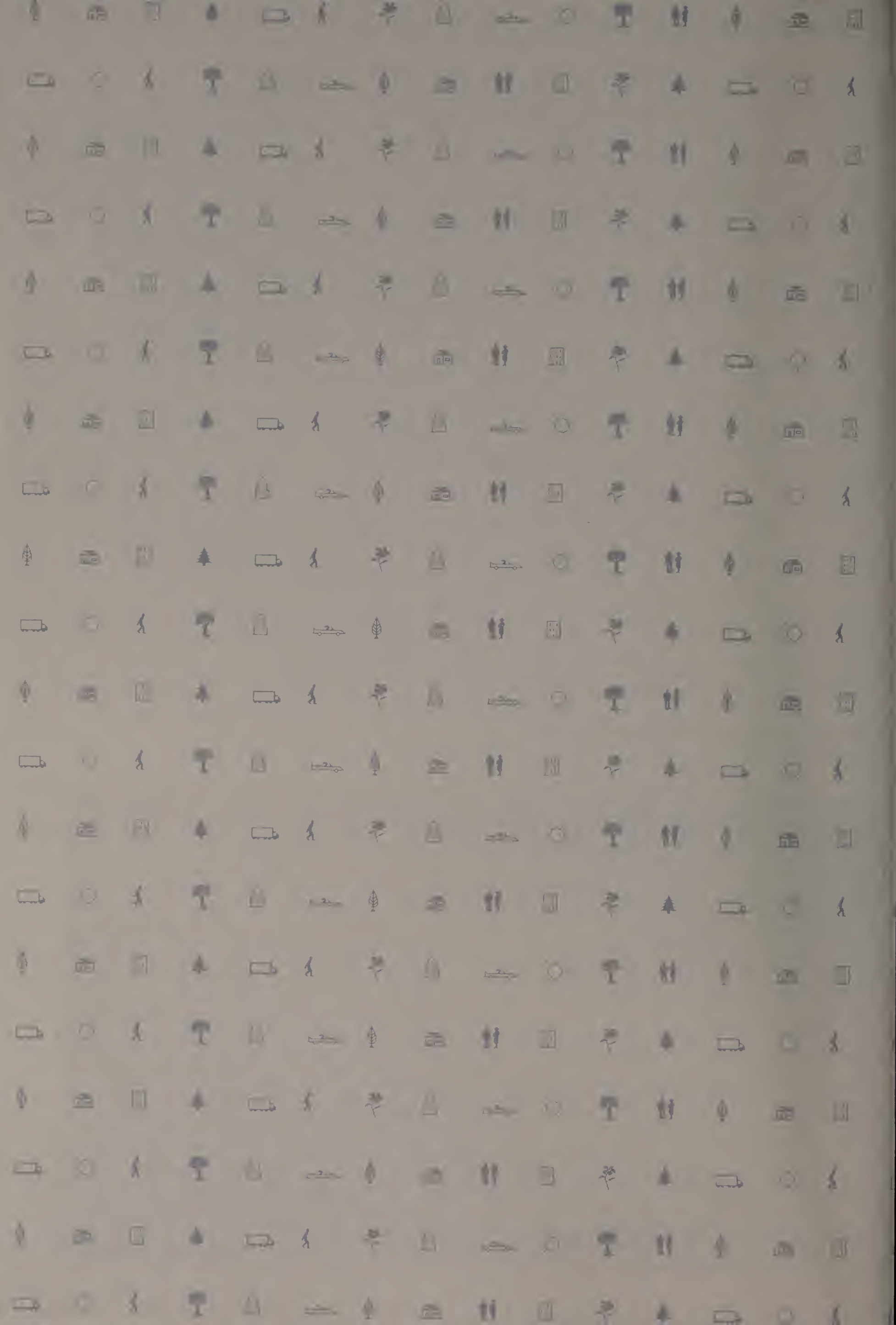
THE PUBLIC DESIGN PROCESS

Participants in the public design process benefit from an understanding of each other's role and point of view. The designer, developer, financiers, public officials, neighbors, special interest groups, and the general public each contribute their own perceptions, skills, goals, and values. When the process is well-managed, each participant's point of view receives consideration at the appropriate moment.

1 WORKING WITH A DESIGNER

" You employ stone, wood and concrete, and with these materials you build houses and palaces. That is con-struction. Ingenuity is at work. But suddenly you touch my heart, you do me good, I am happy and I say: 'This is beautiful.' That is Architecture. Art enters in. My house is practical. I thank you, as I might thank Railway engineers, or the Telephone service. You have not touched my heart. But suppose that walls rise toward heaven in such a way that I am moved. I perceive your intentions. Your mood has been gentle, brutal, charming or noble. The stones you have erected tell me so...By the use of raw materials and starting from con-ditions more or less utilitarian, you have established certain relationships which have aroused my emotions. This is Architecture...The purpose of construction is to make things hold together; of architecture to move us. "

LE CORBUSIER

The designer offers both years of training in solving design and planning problems and the eye and talents of an artist. Both are imperative for good design. As the designer works, he or she considers how the project will look, how it will be used, how users and passers-by will respond to different functional and design elements, how it suits the locale and expresses the social aspirations of the community, how it will be maintained, and what kinds of impact it will have on the municipal infrastructure.

SELECTING A GOOD DESIGNER

Good designers do not come in an easily described package but a few important qualifications may be identified. A truly helpful designer should be able to explain his or her thinking clearly, whether in pictures or words. Members of the public, as either clients or reviewers for a design project, do not have to settle for confusing jargon, poor graphics, or fast answers.

The designer should be willing and able to help residents and their representatives understand all the issues related to a particular design project. This means present-ing slideshows or pictures that help everyone understand how similar situations may have been handled. Pictures help convey the designer's intentions by conveying

The new fire station at Wellesley is shown above as built, and as conceived by the architect during the design phase on the facing page.

STEVE ROSENTHAL
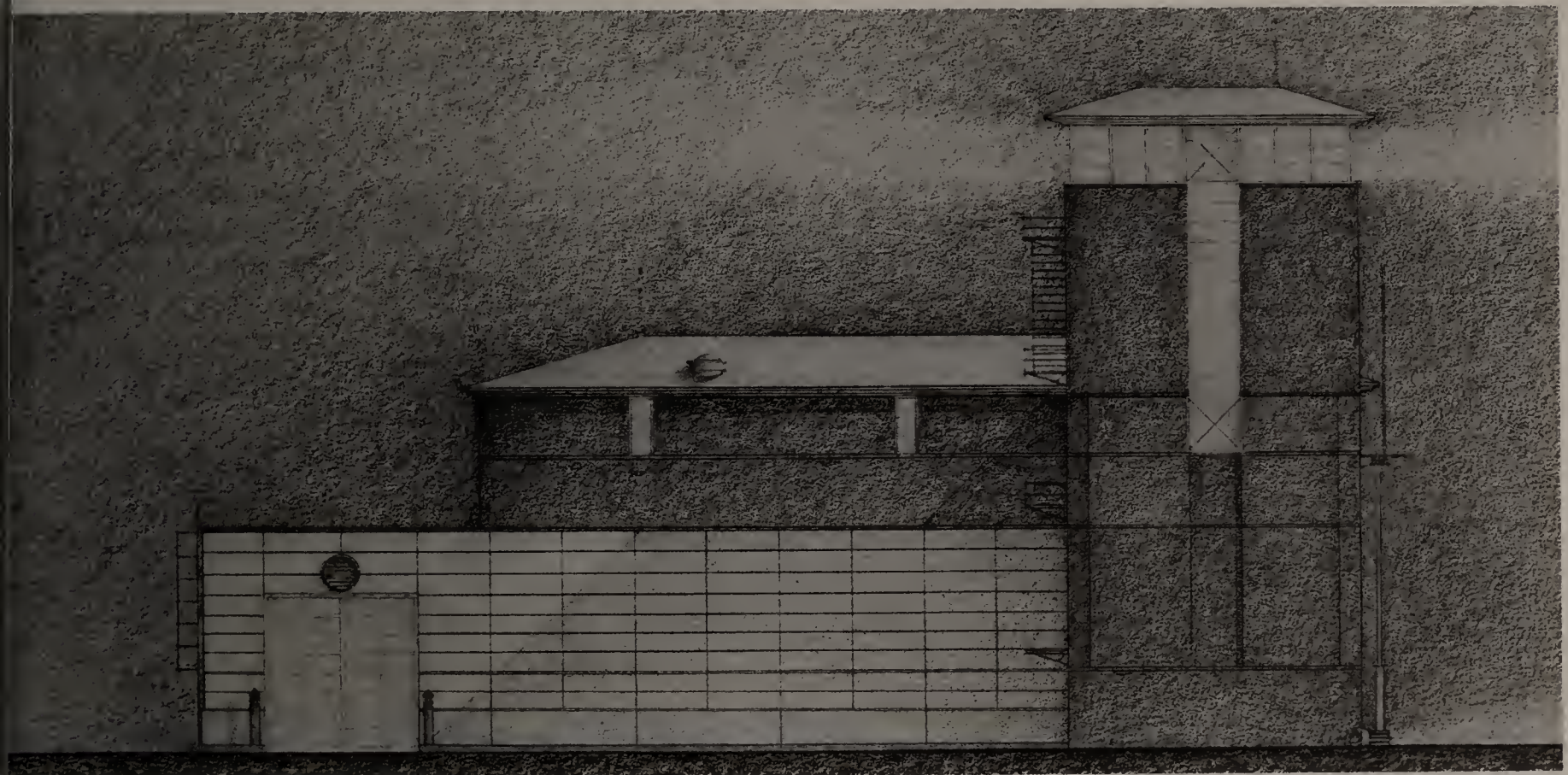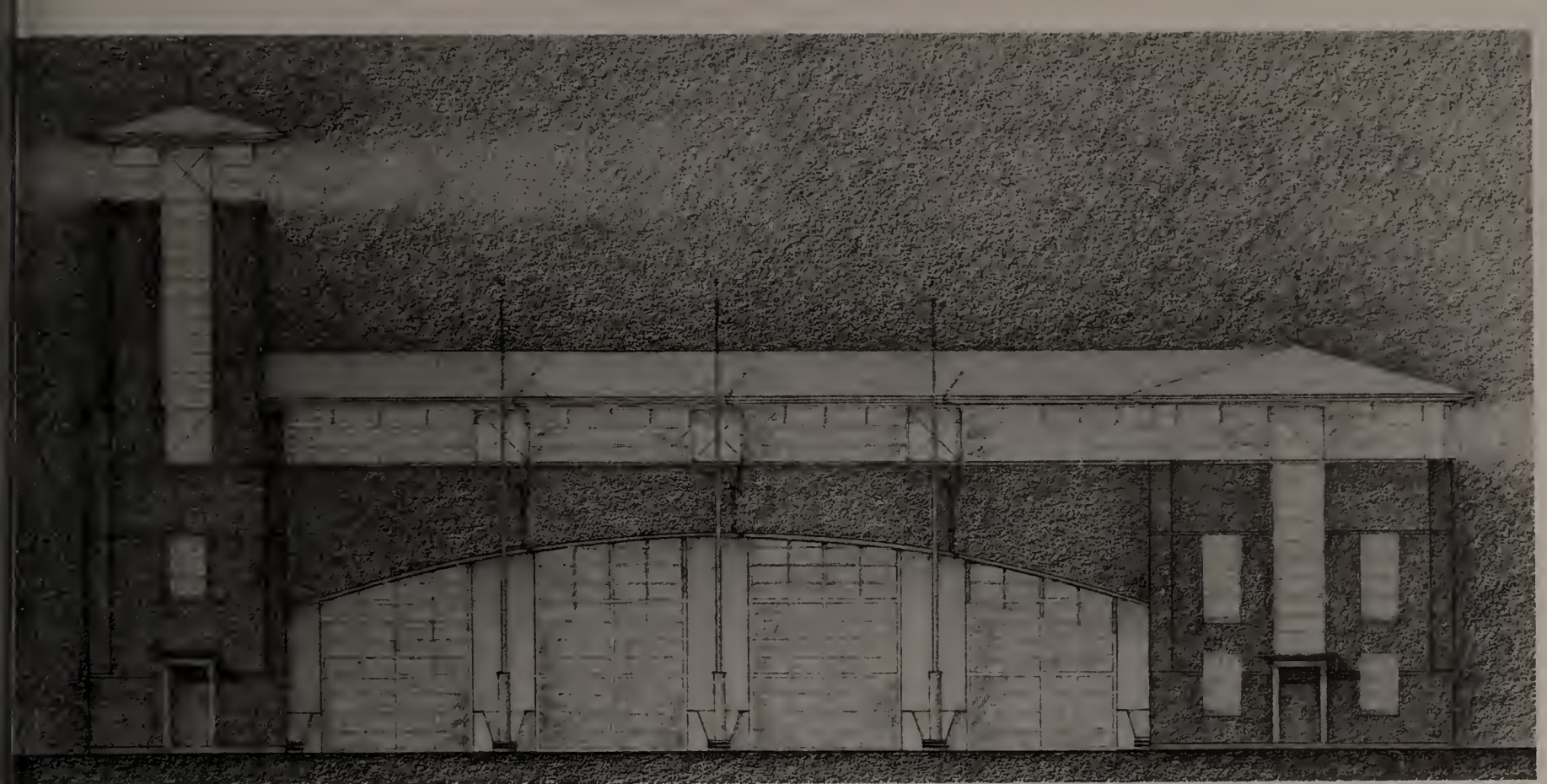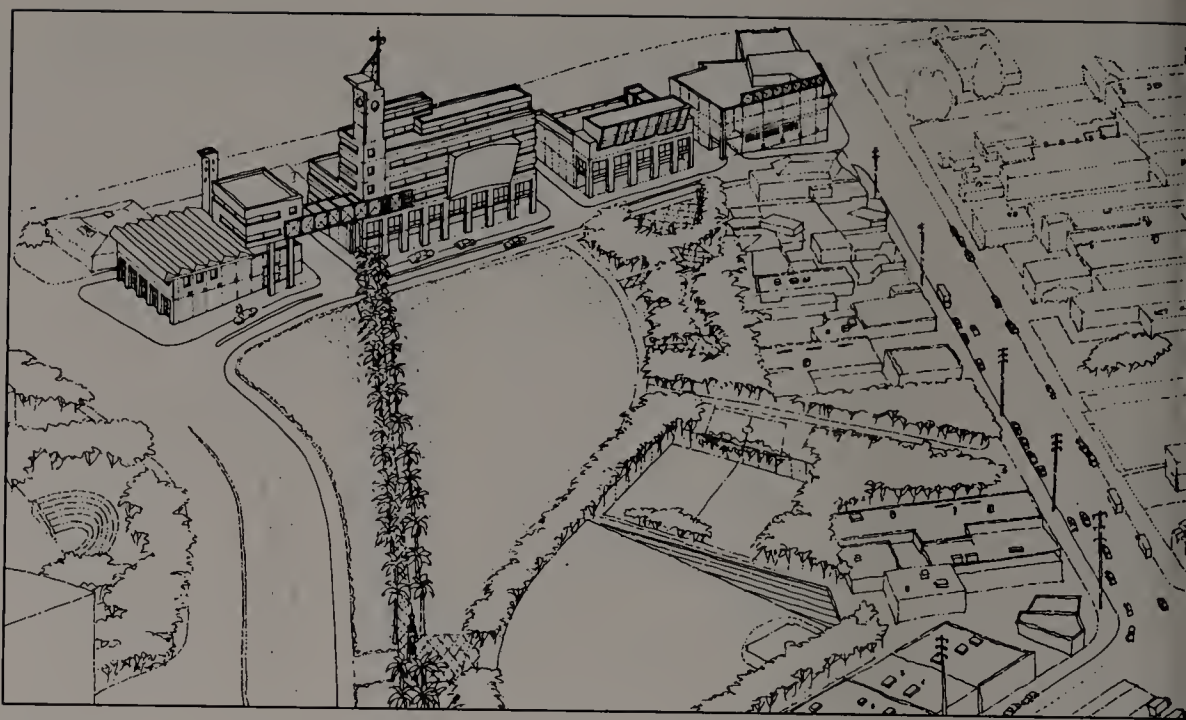
Plan
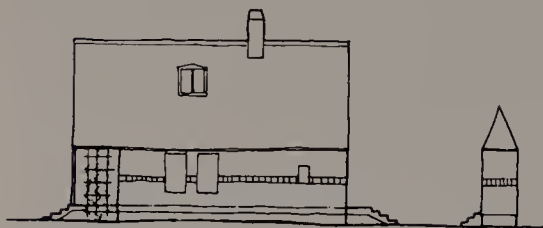
Elevation

Elevation   Section

Perspective
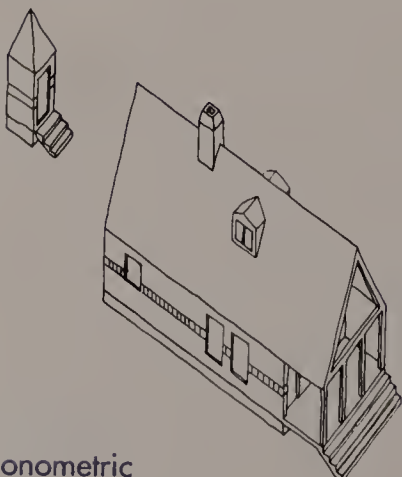
Axonometric

subtle visual qualities that are hard to capture in words. The client's responsibility in this is to take the time to learn and not be too rushed or single-minded to appreciate this important stage of planning and design.

At the same time, a good designer will listen carefully to local residents and officials regarding their goals and concerns for the project and the community. The designer's proposed planning process should include time for this important work. Sometimes community officials benefit from the designer's legwork in seeking out local opinion of which they were unaware. Sometimes different factions in the community disagree about the project, and each must be prepared to hear an assessment of the conflicting desires and their implications for the project.

Designers will have their own strong first impressions of a place. A designer's initial feeling for, and interest in, a place is a good gauge of the inspiration he or she may bring to the design. When interviewing designers for a job, the client has the luxury of obtaining some free insights that will prove helpful in making the final selection. Ask the designer for his or her perceptions of the difficulties of the project, and for a similar assessment of the opportunities involved. This will inform you about both the project and the caliber of the designers being interviewed.

When hiring a designer or planner, past work is important. Looking at similar projects completed by a particular design firm should give the client a clear idea of what approach to expect from the designer. In the case of a young firm without a background in similar projects, the designer should be able to show other projects and discuss any relationship they might have to the project in question.

Remember that the designer's vision or insights are as important as technical expertise. A portfolio of large, impressive projects in an undistinguished style forecasts an undistinguished building or landscape. Choosing a designer whose creative vision you respect, as well as his or her competence, will serve you well later.

To fully serve the community and do justice to a project, a municipality hiring a designer for public work should always advertise for proposals from designers as well as invite qualified applicants that may be known to the community. Some public agencies require advertising as a stipulation attached to the use of their funds. State law requires that contracts amounting to over two thousand dollars be advertised for bids in a carefully monitored process. Even when advertising is optional, it always benefits the community. When a municipality automatically hires the park commissioner's uncle, or accepts the first local offer to do the design cheaply or quickly, it is always shortchanged. It does not benefit from the rich flow of ideas that comes when many proposals are submitted—and several designers interviewed—and it usually does not get the best work.

THE CLIENT'S ROLE IN CREATING GOOD DESIGN

Knowledge is the client's best weapon in pursuing good design. Clients should educate themselves regarding their project and successful similar projects. They can expect the designer to provide this kind of information but they need not rely exclusively on the designer if they feel they are not getting the whole picture. They can visit similar neighboring sites, visit libraries or slide collections, and invite guest speakers to address them. Planners in neighboring towns, or the regional planning agency, may be a good source of information on similar projects. Gathering such information should be a specifically designated component of gearing up for a project.

The public client is unique because of the many players and opinions in a public design process. Members of a community acting as client should understand the points of view of the many participants: various community factions, the designer, and the developer. Emotions and frustrations often run high in the public process of decision-making. Bureaucracy is often a clumsy tool for addressing design questions. It is best to try to be sensitive to this fact.

Being an effective client means knowing community needs and communicating clearly to the designer. This may mean public relations work within the community to make sure that all sectors are fairly represented—the elderly, the carless, the poor, families with children, ethnic minorities, and others. Make the role of different community groups clear. One person or group who can fairly represent all community interests should be the community's representative to the designer. This may be an ad hoc advisory committee created for the project, with members drawn from the neighborhood surrounding the project, the planning board, the historic commission, the neighborhood civic association, and all interested groups.

Aim for consistency when acting as a client. It is not fair to the designer to decide midway that you want services or products that were not specified in the contract, even though they seem to be minor variations, unless you are willing to renegotiate the schedule and budget.

Getting the most for your money as a client also means being open to the ideas and alternatives presented by the designer or others reviewing the project. The designer may listen carefully to residents' desires for a site and still reply with an option that his or her experience has proven to be preferable. This experience bears hearing. One of the designer's most important, though at times unappreciated, roles is to envision a solution or alternative not previously anticipated; a better solution which transcends preconceptions or conventional wisdom. It is up to the client to recognize such rare moments of invention and encourage their implementation.

" Architecture is an art for all men to learn, because all are concerned with it. "

JOHN RUSKIN
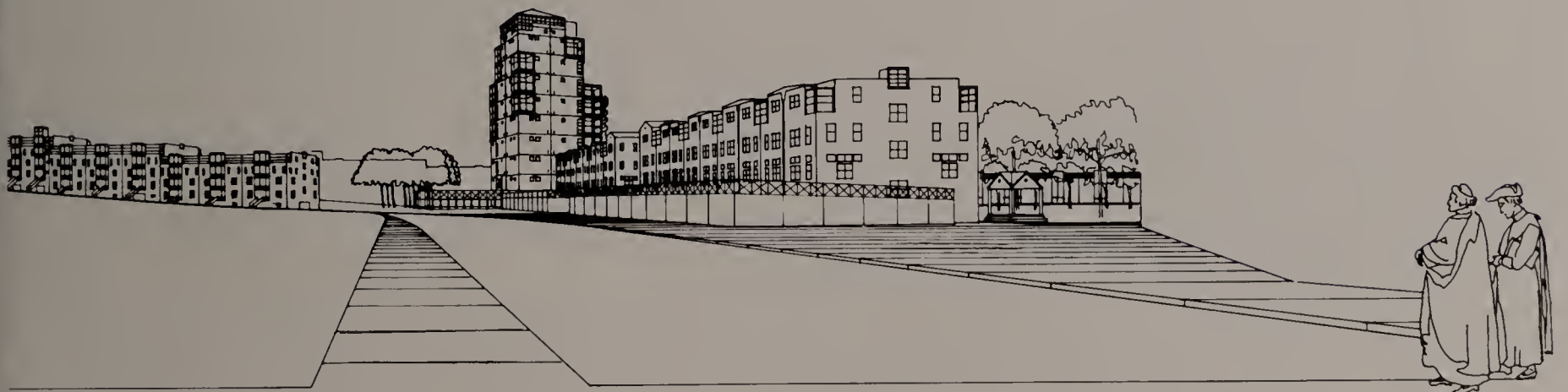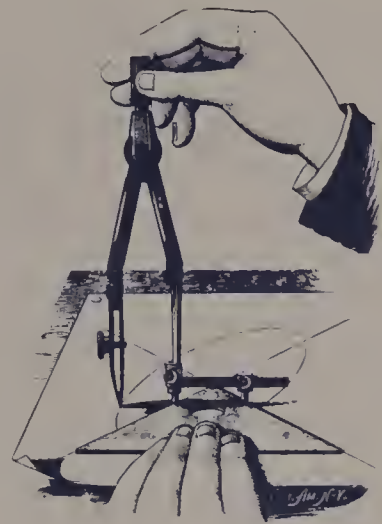
In hiring and working successfully with a designer, it may be helpful to understand some of the important aesthetic and spatial concepts in which a designer deals, in addition to the practical problems that he or she must solve. This will make communication with the designer easier and more rewarding. It will also help explain the drawings and sketches which designers produce in order to express the more poetic qualities of buildings and their surroundings.
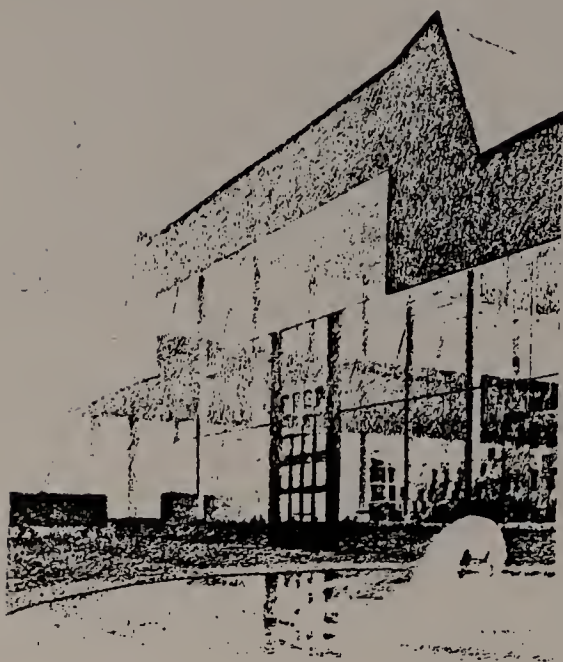
SPACE AND ENCLOSURE Architecture has been called the art of making spaces. Architects and landscape architects are sometimes caricatured as people who are always talking about space. Space and the sense of enclosure are, in fact, an extremely important concept for designers. At the root of these concepts are the basic human needs for shelter, comfort, and place-making. A designer who does not think about the spaces he or she is creating will not create useful or memorable ones.

The concept of space comes into play in both architecture and landscape architecture as well as in town design. Both within and without a building or group of buildings, the architect should be creating attractive, inviting rooms and spaces that people will want to spend time in. The architect achieves this through careful attention to the size and placement of walls and ceilings; in the way walls are articulated and the materials used; and the amount and quality of light admitted through windows and skylights.

Even when only one building is involved, a good architect is mindful of the spaces his or her building creates on the street outside it (such as arcades, plazas, or seating niches), and whether these are pleasant spaces which will draw people in. With a group of buildings, the designer's task is to place them in relation to one another in such a way that they create useful and enjoyable spaces: courtyards, plazas, malls, and streets.

The landscape architect works in a similar way. He or she can create outdoor spaces using walls, trees, fences, or hedges as the architectural elements that enclose an area. The most successful public spaces have this quality of enclosure, although it may be very subtle. In contemporary cities and towns, the sense of enclosure must be more suggested than real, because isolated spaces lend themselves too easily to criminal activity.

> " Whatever its organizing impulse, space is of interest to us in two ways...either because of its orderly containment or because of the drama of its escape. "
>
> CHARLES MOORE

This drawing for an addition to the Lincoln Public Library is one of many detailed drawings in a package of construction documents that show the building contractor how the structure is to be built. Blueprints (though they are no longer always blue) are a type of drawing familiar to most people. They summarize the decisions made during design. On these and the following two pages are examples of drawings which designers make as they design. These are the designer's means of capturing ideas as they are being formulated. Designers think as they draw, and such sketches communicate to designers as words normally do to others.
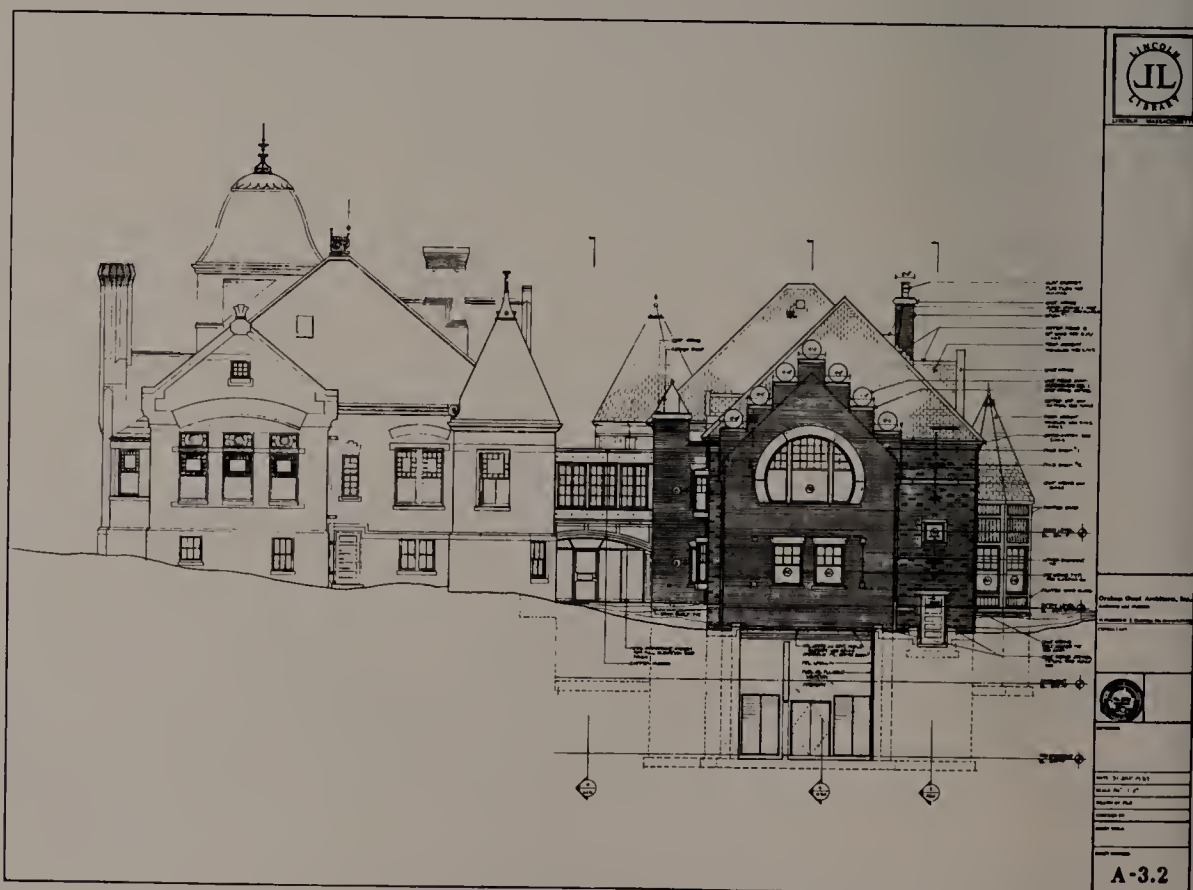
WEIGHT AND MASS In some ways the opposite of the airy volumes of space created within and between buildings or plantings is the weight and mass of the structures themselves. Mass refers to the apparent weight and size of a building. Two buildings of the same size appear to have a very different mass if one is divided into sections and the other presents a single imposing facade. The weight of a building derives from both its size and the materials used to create it. Ancient and modern architecture appear to have strikingly different weights.

Ancient materials—brick and stone—created Greek and Roman architecture, the cathedrals of Europe, and most of our public buildings through the beginning of this century. Modern building materials, on the other hand, can even make skyscrapers seem dramatically weightless. The extremely minimal materials, details, and simple shapes of modern architecture often contribute great elegance to a building. Unfortunately, modern building materials can also appear too insubstantial sometimes, creating a harsh, cheap, or tinsel look.

It is not only materials and construction techniques that add or subtract weight in a building. Composition, decoration, and surface articulation do the same. Symmetry, repetitive columns and windows, and the depth of the wall all lend weight and stability to the classical buildings of Greece and Rome. On the other hand, the thin spires and ascending lines of Gothic cathedrals make heavy stone look light. Because of this effect, early skyscrapers sometimes borrowed Gothic lines. A different expression, one of tautness and streamlining, is sometimes unpredictably shared by traditional shingled saltbox houses and sleek contemporary buildings. Both can seem delicate as if wrapped by a thin curtain, explaining the term "curtain wall." Designers often manipulate our perception of weight, mass, and scale in order to dramatize a building or streetscape, highlight a detail, or accentuate the definition of a space.
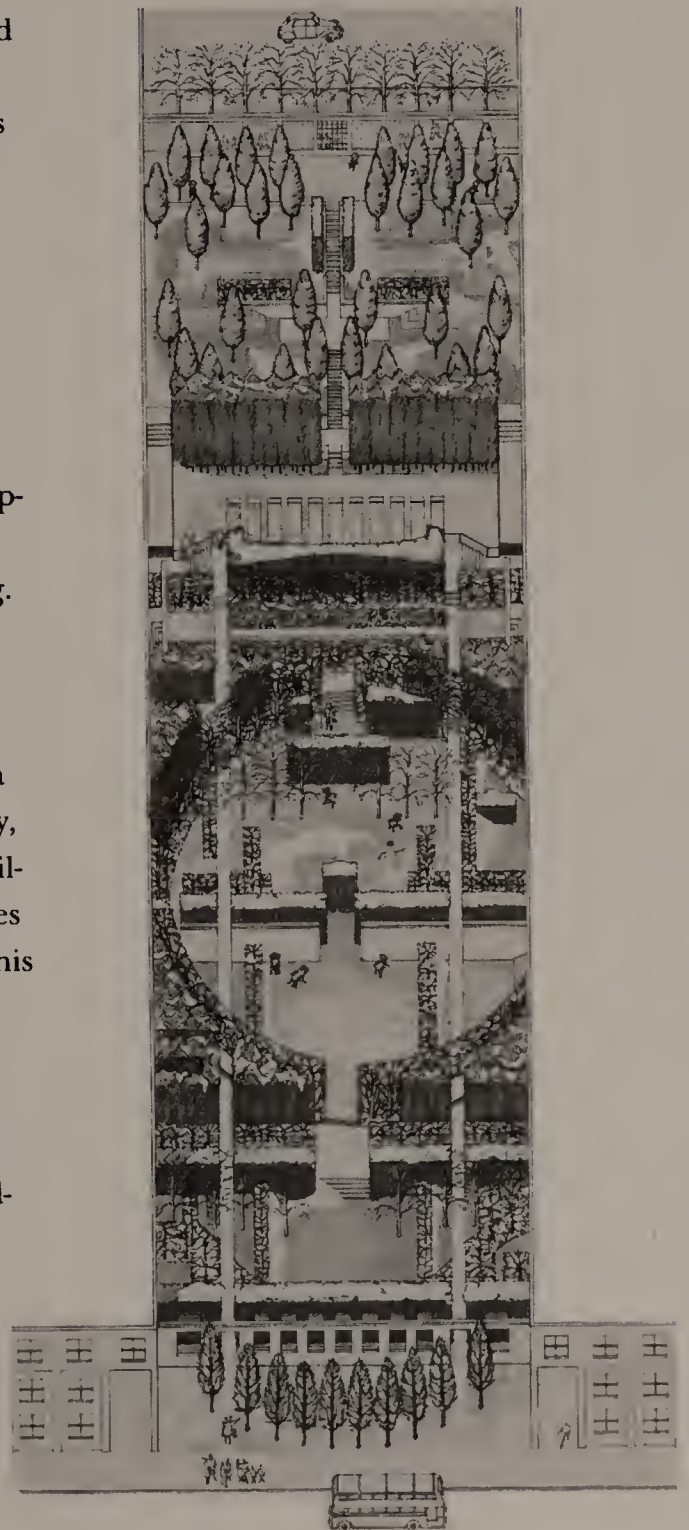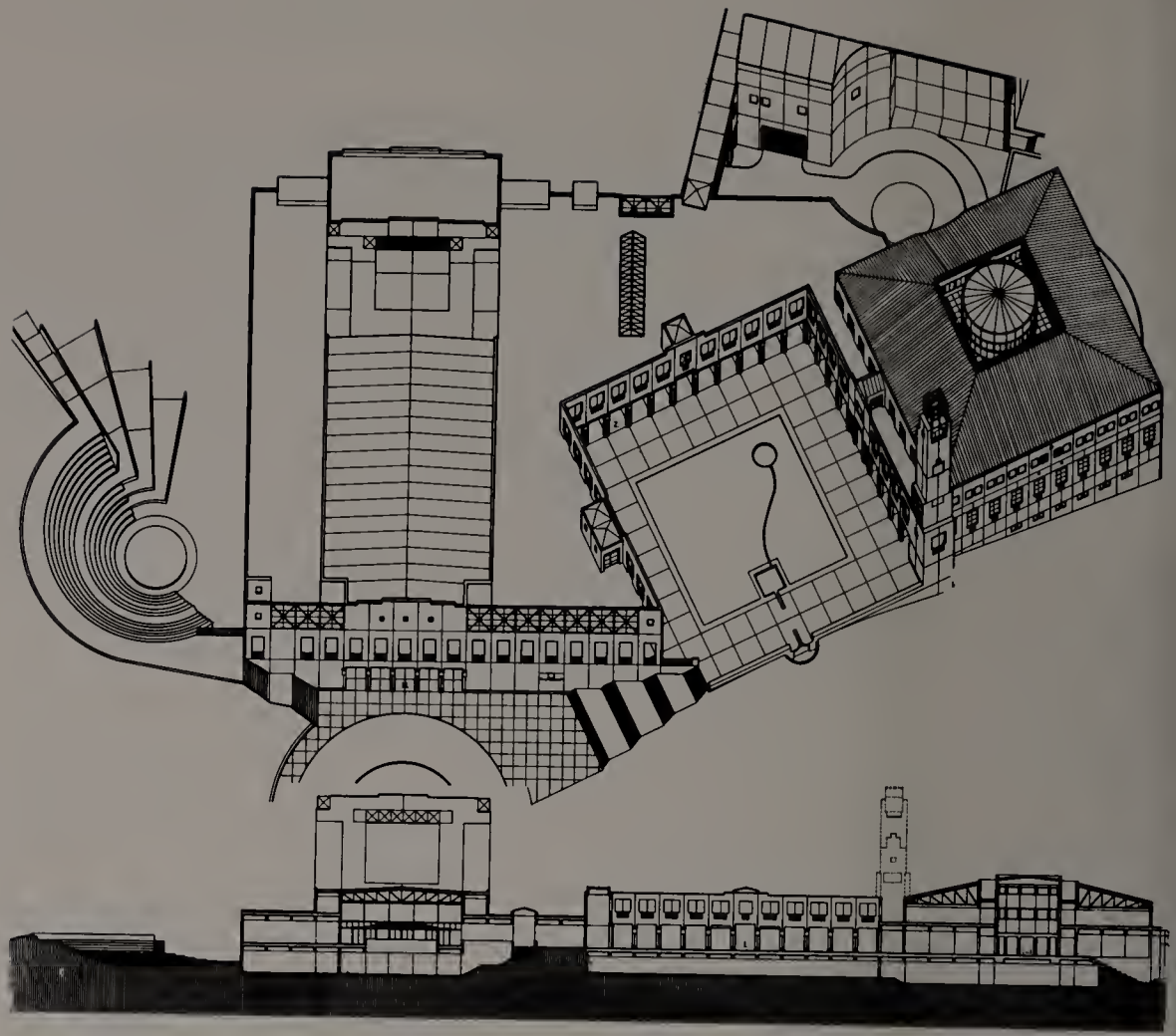
LINE, SHAPE, AND PROFILE

Designers must think in terms of form since it is their role to give shape to society's needs and institutions. The lines and shapes of the surrounding environment are usually more evident to the designer than to the average passer-by. Although these elements register on everyone in a subconscious way, the designer is used to looking for them and considering them consciously.

At the larger scale of a town or landscape, the designer may site and align buildings and plantings in terms of an overall geometric pattern or a pattern tailored to the contours of the landscape. At the scale of a building or group of buildings, the designer will consider what basic profile is appropriate—either to blend or contrast with the surrounding neighborhood. Vertical contrast is sometimes used for accent at corner lots, city gateways, specially significant sites, or important public buildings.

At a smaller scale, a designer may take inspiration from certain elements of adjoining buildings, such as lines of decoration or windows. A landscape architect may use the height of an adjacent balustrade in determining the height of a wall or hedge, or may reinforce the line of the street with a row of trees.

This is quite apart from contextualism, which is an important principle in design and planning. Contextualism usually dictates that the choice of material and style must be sympathetic to surrounding buildings rather than just the form. Attention to line, shape, and profile may be based on context or upon other variables. Contextualism has been a valuable concept in historic neighborhoods and natural settings, and it implies a concern for the building users as part of the building's context. However, it sometimes limits the possibilities of a more original architecture, and tends to politely prettify the grittier expressions of our highly energetic, commercial culture.

GEOMETRY, SCALE, AND PROPORTION

The success of the space defined, the drama of the mass, the elegance of the lines, shape, and profile, and the beauty of light and shadow all depend on the designer's manipulation of geometry and proportion. Skilled manipulation of these elements is as essential to the designer's task as mathematical precision is to the engineer.

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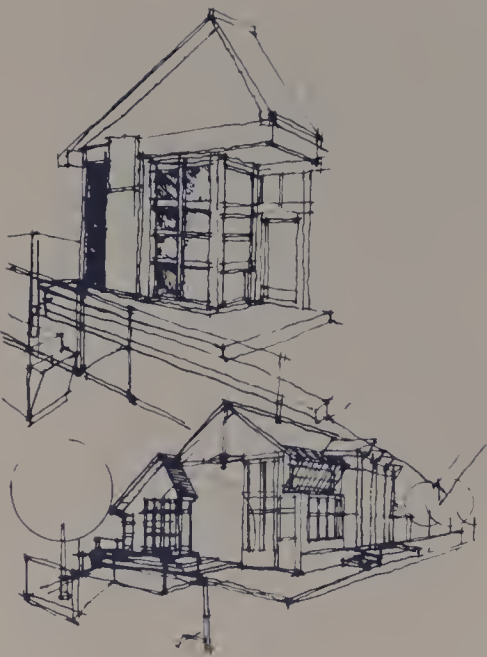
THE PLAY OF LIGHT AND OTHER SUBTLETIES The play of light on certain materials or forms is an example of beauty or subtlety that is hard to communicate—even hard to draw. This is where a designer's greatest insights and frustrations often arise. Beautiful, harmonious details in the decoration of a building, and not merely gimmickry, create a subtle pleasure for the beholder that is often lacking in contemporary buildings. The absence of such detail represents low budgets more often than the designer's lack of imagination or poor craftsmanship. Still, a quality of artistry should be sought, appreciated, and purchased, when possible. It pays for itself in the pride and delight it provides to users and the community at large, probably extending the life of the building.
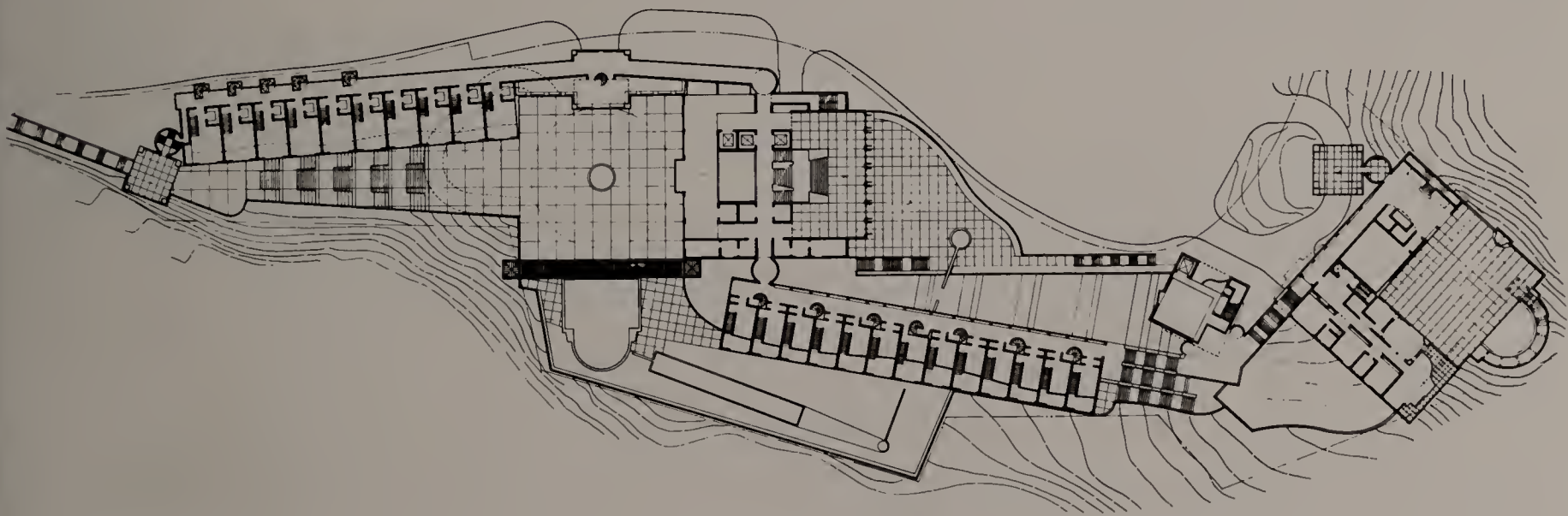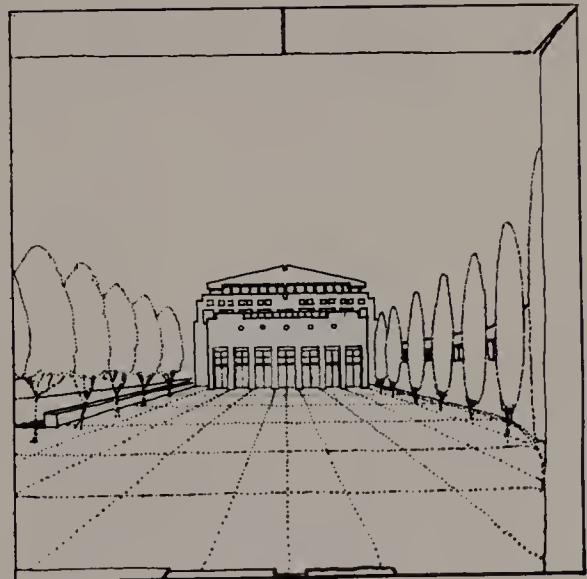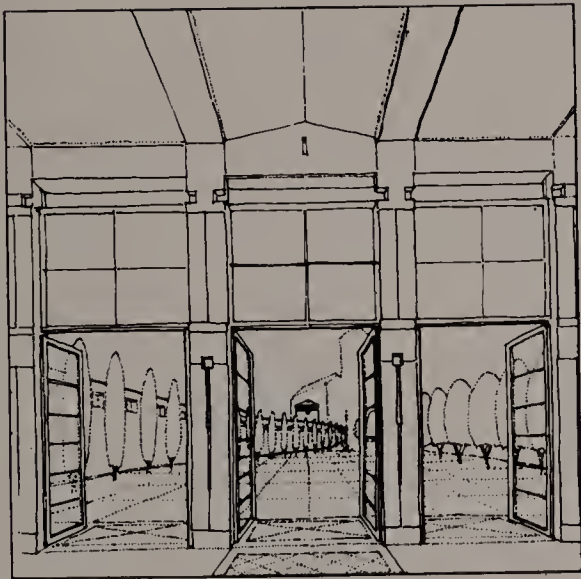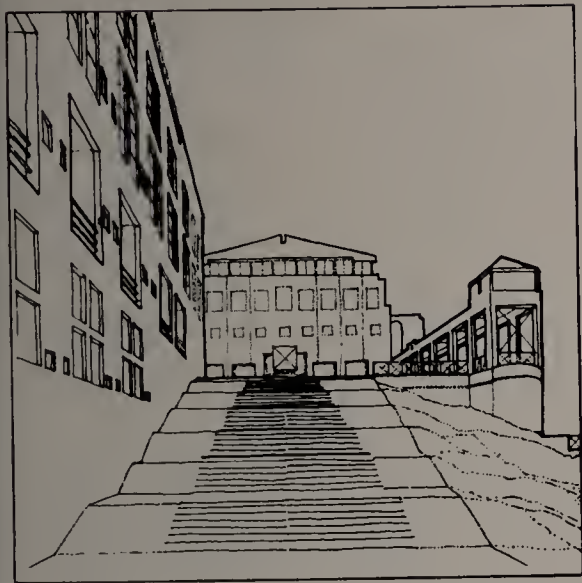
2 PARTICIPATION & REVIEW

" Buildings, and the evolution of building types, are not formed exclusively by architects. "

JAMES ACKERMAN

THE ROLE OF EACH PARTICIPANT

Each participant in the design and review processes will bring special insights based on a set of specific interests in the project or planning effort. The cast of participants may include the project sponsor or developer (public or private); the financial investors; designers, planners, and other professional consultants; the prospective users; public officials; statutory, environmental, and design review groups; special interest groups including neighbors and abutters; and the public at large.

In our culture, the *real estate developer* often plays a primary role since most develop-ment is instigated by private concerns. The private developer and his or her affiliated investors make a financial investment on which they require a return or profit. Each developer will have different standards for contributing to the community or invest-ing in the quality of his or her development. A developer may have different ideas about what will improve the community than the historical commission or concerned citizens or planners. The community can establish standards for development through municipal regulations, permitting procedures, reviews, approvals, and design guidelines—all based on a master plan for the community's future.

Developers appreciate clear guidelines. First, this lets them know what to expect and guarantees them consistent treatment. Second, it ensures that the quality of any subsequent neighboring development will be held to a minimum quality that protects their investment.

The *public development authority* tries to sponsor improvements to benefit the neighbor-hood, the municipality, the region, the state or, sometimes, the nation. Sometimes, the public-sponsored project is warmly and gratefully received. Sometimes, however, even a simple tree-planting project is opposed by members of the community whose neighborhoods are not immediate beneficiaries of the project or who simply do not like change. Education is helpful in such cases, though often hard to bring about. (See the "Audio-Visual Aids" list in the bibliography for a list of films and videotapes that may be shown at public meetings or aired on local TV.)

Development brings tough choices—whether public or private. For example, when a highway is proposed to meet growing regional traffic needs, a small number of people are asked to bear the burden of losing property or property values so that everyone may benefit from better traffic conditions. Every increment of growth brings demands on public services and the environment. A community which has developed a plan to anticipate difficult decisions, and set goals and guidelines for making them, is in a better position to address all participants and issues reasonably.

The *designer* or *planner* brings professional insights to a project and attempts to create the most practicable and successful solution possible. The designer will incorporate the clients' opinions and desires and will expect clients to carefully consider his or her insights and professional opinion. As with the developer, it is important to understand the beliefs and values behind the professional's recommendations, and

ANTON GRASSI

A decade ago a fire such as this would have led to a rapid demolition of this block. Community participation is impor-tant to restore areas like this to an active and attractive role in the community. Community interest gives developers a reason to work with once-grand facades (and community guidelines) rather than starting anew.

1. INTENT

This ordinance is designed to ensure the development of open land along the lines of traditional neighborhoods. Its provisions adopt the urban conventions which were normal in the United States from colonial times until the 1940's.

Traditional neighborhoods share the following conventions;

- Dwellings, shops and workplaces, all limited in size, are located in close proximity to each other.

- A variety of streets serve equitably the needs of the pedestrian and the automobile.

- Well-defined squares and parks provide places for informal social activity and recreation.

- Well-placed civic buildings provide places of purposeful assembly for social, cultural and religious activities, becoming symbols of community identity.

- Private buildings are located along streets and squares forming a disciplined edge unbroken by parking lots.

Traditional neighborhoods achieve certain social objectives:

- By reducing the number and length of necessary automobile trips, traffic congestion is minimized and commuters are granted increased personal time.

- By bringing most of the needs of daily living within walking distance, the elderly and the young gain independence of movement.

- By walking in defined public spaces, citizens come to know each other and to watch over their collective security.

- By providing a full range of housing types and workplaces, age and economic class are integrated and the bonds of an authentic community are formed.

- By promoting suitable civic buildings, democratic initiatives are encouraged and the organic evolution of the society is secured.

Until the advent of postwar zoning ordinances, traditional neighborhoods were commonplace in the United States. Many survive as examples of communities which continue to be practical and desirable today.

	2. LAND USE	3. LAND ALLOCATION	4. LOTS BUILDINGS	5. STREETS ALLEYS	6. PARKING
GENERAL	2.1 The TND Option shall constitute an overlay district available by right where current zoning allows any use except industrial. 2.2 The TND Option requires a minimum contiguous parcel of 40 acres and a maximum of 200 acres. Larger parcels shall be developed as multiples, individually subject to the TND provisions below. 2.3 The Developer of the TND shall demonstrate the availability and adequacy of access roads and utilities.	3.1 The entire land area of a TND shall be subdivided into Public Tracts and Lots. 3.2 Similar Lot types shall generally enfront across Street Tracts. Dissimilar Lot types may enfront across Square and Park Tracts or abut at rear lot lines.	4.1 All Lots shall share a Frontage Line no less than 15 ft. long with a Street or Park Tract. 4.2 All buildings shall have their main entrance opening to a Street or Park Tract. 4.3 Stoops, open colonnades and open porches may encroach up to 10 ft. into the front setbacks. 4.4 Portions of buildings having a footprint of not more than 150 sq. ft. shall be exempted from height limitations. 4.5 Building walls placed less than 5 feet from a side or rear lot line shall remain windowless and doors shall be fire rated.	5.1 Streets shall provide access to all Public Tracts and Private Lots. 5.2 All streets shall terminate at other streets within the TND and connect to existing and projected streets outside the TND. 5.3 The average perimeter of all Blocks within the TND shall not exceed 2000 ft. 5.4 Utilities shall run along Alley Tracts wherever possible. 5.5 Streetlamps shall be installed on both sides of Street Tracts at no more than 75 ft. intervals measured diagonally across the streets. 5.6 Streetrees shall be installed on both sides of Street Tracts at no more than 75 ft. intervals measured diagonally across the street.	6.1 On-street parking directly enfronting a lot shall count toward fulfilling the parking requirement of that lot. 6.2 Parking lots shall generally be located at the rear or at the side of buildings and shall be screened from the sidewalk by Streetwalls. 6.3 Parking lots and parking garages shall not be located at street intersections. 6.4 Adjacent parking lots shall have internal vehicular connections. 6.5 Parking lots shall be landscaped with one Shade Tree per six parking spaces.
PUBLIC	2.4 Public Tracts contain publicly owned Parks, Squares, Greenbelts, streets and alleys.	3.3 A minimum of 15% of the land area of a TND shall be permanently allocated to Park or Square Tracts. 3.4 Natural vistas such as waterfronts and promontories shall have 50% of their perimeter allocated to Street Tracts. 3.5 Golf courses shall be located within Greenbelt Tracts.	4.6 Balconies and open colonnades shall be permitted to encroach up to 10 ft. into a Public Tract. Such encroachments shall be protected by easements.	5.7 Public Tracts containing Squares shall provide a street along their perimeter which conforms to the specifications corresponding to the efronting lot types. 5.8 Streets forming part of the State highway systems shall conform to State bighway standards.	6.6 The Developer shall demonstrate the provision of adequate parking for Public Tracts containing Squares and Parks. 6.7 Parking lots on Public Tracts, shall be graded, compacted and landscaped, but may be left unpaved.
CIVIC	2.5 Civic Lots contain publicly or privately owned buildings of communal use such as Neighborhood Halls, libraries, post offices, schools, day care centers, clubhouses, religious buildings, recreational facilities and the like.	3.6 A minimum of 5% of the land area of a TND shall be dedicated to Civic Lots. 3.7 Civic Lots shall be located within or adjacent to Square or Park Tracts or on a Street Vista. 3.8 The Developer shall covenant to construct a Neighborhood Hall on a Civic Lot upon the sale of 75% of the lots. 3.9 The construction of buildings on Civic Lots shall be supported by an ongoing assessment through the Homeowners' Association. 3.10 For each increment of 50 dwellings, there shall be a Civic Lot of [illegible] sq. ft. reserved for day-care use and dedicated to public ownership.	4.7 Buildings located on Civic Lots shall be subject to no height or setback limitations. 4.8 Buildings located on Civic Lots shall be painted a consistent color throughout the TND.	5.9 Civic lots shall enfront on tracts containing streets which conform to the street specifications of the adjacent Lot Types.	6.8 The Developer shall demonstrate the provision of adequate parking for the various types of Civic buildings. Shared parking shall be permitted where day/night and workday/holiday schedules do not overlap (i.e. Neighborhood Halls). 6.9 Parking lots for Civic buildings used principally on holidays must be graded, compacted and planted, but may be left unpaved (i.e. religious buildings). 6.10 No less than 7[illegible] % of the off-street parking places shall be to the rear of the building. Access may be through the Frontage.
SHOPFRONT	2.6 Shopfront Lots contain privately owned buildings for retail, restaurant, office, entertainment, Lodging, Artisanal and residential uses. 2.7 No less than 2[illegible] % of the building area must be maintained for residential use.	3.11 A minimum of 5% and a maximum of 50% of the total land area of a TND shall be permanently dedicated to Shopfront Lots.	4.9 Buildings on Shopfront Lots shall have the Facade built directly on the Frontage Line along 60% of its length.. 4.10 Buildings on Shopfront Lots shall have no required setbacks from the side lot lines. 4.11 Buildings on Shopfront Lots shall cover no more than 70% of the lot area. 4.12 Buildings on Shopfront Lots shall not exceed 4 Stories in height.	5.10 Shopfront Lots shall enfront on Tracts containing streets consisting of two 12 ft. travel lanes, one 10 ft. central turning lane and diagonal parking on both sides. Sidewalks shall be no less than 12 ft. wide and the Curb Radius shall not exceed 15 ft. 5.11 Shopfront Lots shall have their rear lot lines coinciding with an alley tract 24 ft. wide containing a vehicular pavement width of 8 ft.	6.11 There shall be one parking space per 250 sq. ft. of building available for restaurant, office, entertainment and artisanal uses; one per room of lodging and one per two bedrooms of residential use. 6.12 No less than 75 % of the parking places shall be to the rear of the building. Access may be through the Frontage.
ROWHOUSE	2.8 Rowhouse Lots contain privately owned buildings for residential, Limited Office, and Limited Lodging uses.	3.12 A maximum of 8 Rowhouse lots may be consolidated for the purpose of constructing a single apartment building containing dwellings equal in number to the lots consolidated. 3.13 Setbacks on consolidated Rowhouse lots shall apply as in a single lot.	4.13 Buildings on Rowhouse Lots shall be setback between 5 and 15 ft. from the Frontage Line. Buildings at street intersections must be setback 5 ft. from both Frontage Lines. 4.14 Buildings on Rowhouse Lots shall have no required setbacks from the side lot lines. 4.15 Buildings on Rowhouse Lots shall cover no more than 70% of the lot area. 4.16 Buildings on Rowhouse Lots shall not exceed 3 Stories plus Raised Basement in height.	5.12 Rowhouse Lots shall enfront on Tracts containing streets consisting of two 11 ft. travel lanes and parallel parking on both sides. Sidewalks shall be no less than 6 ft. wide and the Curb Radius shall not exceed 15 ft. 5.13 Rowhouse Lots shall have their rear lot lines coinciding with an alley tract 24 ft. wide containing a vehicular pavement width of 8 ft.	6.13 There shall be one parking place per 250 sq. ft. of office, one per room of lodging and one per two bedrooms of residential use. 6.14 All off-street parking places shall be to the rear of the building. Access shall be through a vehicular alley only.
HOUSE	2.9 House Lots contain privately owned buildings for residential, Limited Office, and Limited Lodging uses.	3.14 A maximum of three House Lots may be consolidated for the purpose of constructing a single building. 3.15 Setbacks on consolidated House Lots shall apply as in a single lot.	4.17 Buildings on House Lots shall be setback between 15 and 35 ft. from the Frontage Line. 4.18 Buildings on House Lots shall be setback from the side lot lines equivalent to no less than 20% of the width of the lot. The entire setback may be allocated to one side. 4.19 Buildings on House Lots shall be setback no less than 20 ft. from the rear lot line. 4.20 Buildings on House Lots shall cover no more than 50% of the lot area. 4.21 Buildings on House Lots shall not exceed 2 Stories plus Attic in height. 4.22 Buildings on House Lots with front setbacks exceeding 20 ft. shall have a Streetwall built along 80% of its Frontage Line.	5.14 House Lots shall enfront on tracts containing streets consisting of two 10 ft. travel lanes and parallel parking on one side. Sidewalks shall be no less than 4 ft. wide and the Curb Radius shall not exceed 25 ft. 5.15 House Lots shall have their rear lot lines coinciding with an alley tract 10 ft. wide containing a pedestrian pavement width of 4 ft.	6.15 There shall be one parking place per 250 sq. ft. of office, per room of lodging and one per two bedrooms of residential use. 6.16 All off-street parking places shall be to the side or the rear of the building. Garages or carports shall be located a minimum of 20 feet behind the Facade. Access may be through the Frontage.
WORKSHOP	2.10 Workshop Lots contain privately owned buildings for Automotive and Light Manufacturing.	3.16 A minimum of 5% and a maximum of 25% of the total land area of a TND shall be permanendy dedicated to Workshop Lots.	4.23 Buildings on Workshop Lots shall not require setbacks from any lot line. 4.24 Buildings on Workshop Lots shall cover no more than 50% of the lot area. 4.25 Buildings on Workshop Lots shall not exceed 2 Stories in height. 4.26 Workshop Lots shall be separated from other lot types at the side and rear lot lines by a continuous masonry wall no less than 10 ft. in height.	5.16 Workshop Lots shall enfront on tracts containing streets consisting of two 12 ft. travel lanes, one 10 ft. central turning lane amd parallel parking on both sides. Sidewalks shall be no less than 4 ft. wide and the Curb Radius shall not exceed 35 ft. 5.17 Workshop Lots shall have their rear lot lines coinciding with an alley tract 24 ft. wide containing a vehicular pavement width of 8 ft.	6.17 There shall be one parking place per 250 sq. ft. of building. 6.18 Off-street parking places may be to the front, the side or the rear of the building.

7. DEFINITIONS

Terms in general use throughout this ordinance shall take their common accepted meaning. Terms requiring interpretation specific to this ordinance are defined as follows:

Artisanal Use: Premises for the manufacture and sale of artifacts employing only handwork and/or table mounted electrical machinery emitting no odors or noise beyond the immediate premises.

Attic: The habitable area within the pitch of a roof.

Automotive Use: Premises for the selling, servicing and/or repairing of motorized wheeled vehicles.

Block: The aggregate of lots and Alley Tracts circumscribed by a continuous set of Street Tracts.

Curb Radius: The curved edge of the street at an intersection measured at the inner edge of the parking lane.

Facade: The wall of a building which corresponds to a lot Frontage.

Frontage Line: The lot line which coincides with a Street Tract.

Greenbelt: An open area surrounding the built-up area of a TND along 75% of its perimeter, being no less than 50% of the total area of the TND and no less than 200 ft. wide at any place. The area shall be preserved in perpetuity in its natural condition, or used for farming, animal husbandry, golf courses, or subdivided into House lots no smaller than 5 acres

Homeowner's Association: The owners of lots and buildings within the TND, incorporated under the auspices of articles which safeguard the rights of the owners in compliance with the laws of the State. The document shall institute a system or representative government by the assembly of the owners maintaining prerogatives for the developer greater than that of the owners only during the period of sales. The document shall set: standards for construction and maintenance on private lots; provisions for maintenance on public tracts; and support for the construction of new buildings on civic lots by an ongoing special assessment equivalent to no less than 10% of the total yearly assessment of the Association.

Light Manufacturing Use: Buildings for the repair, assembly or fabrication of artifacts emitting no atmospheric pollution, no noxious smells beyond the lot lines and noise for a period no longer than 8 daytime hours.

Limited Lodging Use: Buildings providing no more than 8 rooms for short-term letting and food service before noon only.

Limited Office Use: Buildings for the transaction of business or the supply of professional services, employing no more than 8 persons.

Lodging Use: Buildings providing food service and rooms for short-term letting.

Neighborhood Hall; A public assembly building containing at least one room having an area equivalent to 20 sq. ft. per dwelling.

Neighborhood Proper: The built-up area of a TND, including lots, Parks and Squares but excluding Greenbelt areas.

Park: An open space, paved no more than 10% of its area, naturalistically landscaped, and surrounded by building lots on 75% of its perimeter.

Raised Basement: A semi-underground story serving to raise the principal floor level no more than 5 ft. above the sidewalk.

Shade Tree: A deciduous tree of wide canopy, resistant to root pressure and sodium, no less than 4" caliper and 8 ft. clear trunk at the time of planting.

Square: An open space paved not less than 35% of its area surrounded by building lots on 90% of its perimeter.

Streetwall; A masonry wall or wood fence built along the Frontage Line
between 3 and 5 ft. in height.

Story: a habitable level within a building no more than 14 ft. in height from finished floor to finished ceiling.

Street Lamps: A light standard between 8 and 14 ft. in height equipped with an incandescent or metal halide light source.

Street Tree: A deciduous tree or palm resistant to root pressure and sodium, no less than 4 in caliper and 8 ft. clear trunk at the time of planting.

Street Vista: A building site located to terminate the view down the axis of a Street Tract.

T.N.D. ORDINANCE

TRADITIONAL NEIGHBORHOOD DEVELOPMENT

This document developed in part with a grant from the National Endowment for the Arts.

DRAFT FEBRUARY 15, 1989

© Foundation for Traditional Neighborhoods
Post Office Box 440
Ossippee, New Hampshire 03864

The Traditional Neighborhood Development ordinance above incorporates design guidelines along with land use provisions. Developed by the Foundation for Traditional Neighborhoods of Ossippee, New Hampshire, the ordinance serves as a model which communities may adopt to simplify their zoning ordinances and structure development in a way that may foster the character and livability of the traditional small town.

to understand how they fit or conflict with those of residents or other participants. Generally a public that is willing to work with the designer and take the time to learn about a project, and inform the designer about the community, is both very helpful and very effective.

When an unwanted project is being forced on a town—such as a condominium village where a farm used to be—this kind of participation may be harder to come by, but it remains important. A community can still create design guidelines and building codes that, for example, camouflage the development from the roads or require the developer to contribute other public amenities. It can also create regulations to guide future development before it's too late, and get the help of local land trusts, conservation groups, and state agencies to purchase options on other local farms. Every round of participation in these processes prepares community residents for future projects they will have to tackle together to make their town or city look and work the way they want.

DESIGN GUIDELINES AND DESIGN REVIEW

The design review process allows a community to apply its own goals to the design being created. Review can occur at various stages, in various forms, and through various municipal organizations: the zoning, planning, health, or other boards, the historical or conservation commissions, or an ad hoc citizens' committee. And at some point in the development of projects with an impact on the community, the general public is usually given one or more opportunities to preview the design, ask questions, and request changes. Such opportunities should be well-advertised through flyers, newspapers, and posters.

While time-consuming, the ongoing dialogue ensures that all the participants learn from each other. It may be helpful to have a single review board composed of representatives of every local agency and commission concerned. This allows many—and sometimes conflicting—opinions to be heard and addressed at once, and reduces the number of presentations the developer-designer team have to give.

At whatever stage design review occurs, it can be a rewarding or frustrating process— or both—depending on the approach of the participants and the guidelines which establish the review process. An atmosphere of mutual respect is an important ingredient in the success of the process, as questions and challenges are posed by many parties. When one party takes an intractable position, or a position of disrespect for other participants, there will usually be more hard feelings and a less successful outcome.

The points in each section of this Primer can be used as a checklist for review. The questions of how this will change the community and what type of place it will be should be thoroughly and convincingly answered. Don't take the designer's word that it will be lively or easy to use. Look for yourself. What components will make it lively? How easy to find is the entrance? The elevator? Is the building convenient to parking or public transportation?

Try to distinguish between fact and opinion when judging a project. This is hardest in the case of aesthetic decisions. Normally, aesthetic decisions should not dominate the design review process, though human nature may be so inclined. Occasionally, the quality of a project declines just because of earnest attempts to reconcile too many (sometimes ill-founded) opinions. Remember to determine the environmental impact before dwelling on the choices of paint.
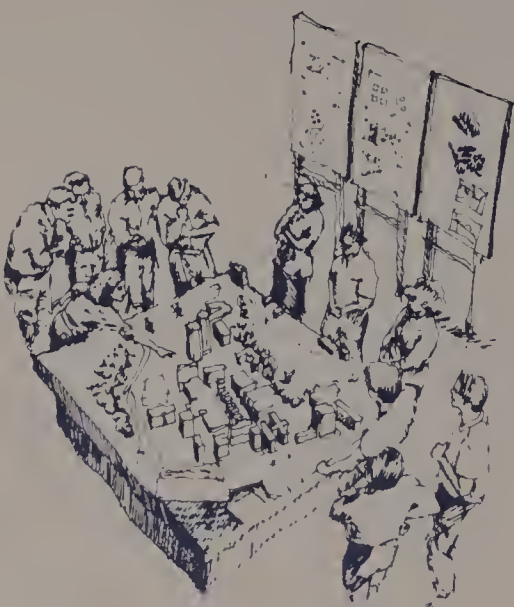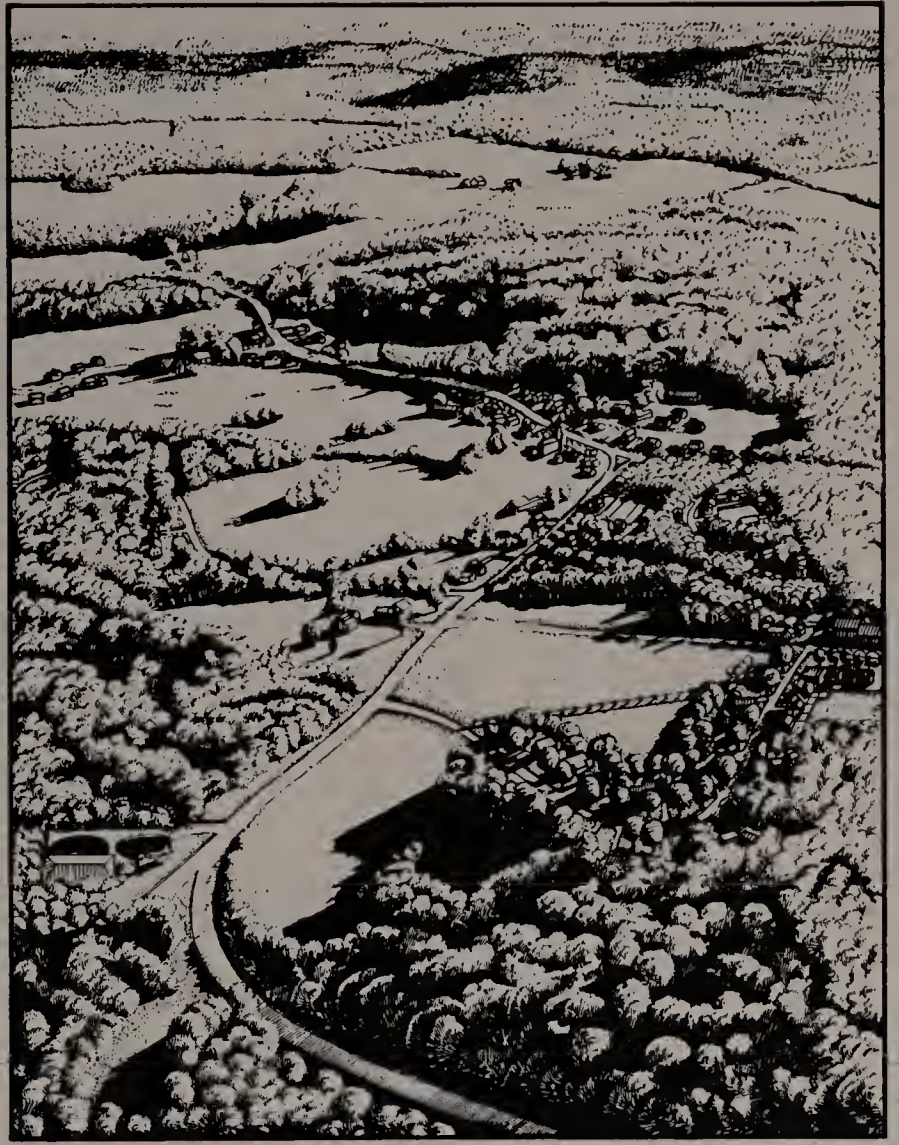
KEVIN WILSON

The rural landscape on the left projects development according to conventional zoning. The same landscape, shown at right with an equal amount of development, has been largely spared by innovative zoning and planning bylaws and sensitive design guidelines. These scenarios appeared in the manual, *Dealing with Change in the Connecticut River Valley*, sponsored by the Center for Rural Massachusetts.

TAKING ACTION

◆ Establish design guidelines and the way in which they will be reviewed early in the process, prior to the request for proposals or qualifications. Guidelines should be described along with the project.

◆ In the case of a public project, build the review process into the designer's or planner's contract. Be specific about how many reviews and what kinds of presentations will be expected, and then stick to the agreement.

◆ In the case of a private project, consider making design review part of the permitting and approval processes. Again, make the requirements clear and beware of overregulating the process.

◆ Require developers to contribute to public services, and require thoughtful design by specifying which issues a design must address.

◆ Be prepared to bargain with private developers. Find out what the developer would like in exchange for concessions to community concerns. Build bargaining power into local bylaws. Stipulate what bonuses the developer will receive in exchange for amenities or contributing to public welfare.

◆ Consider having one review board made up of representatives from all appropriate local agencies and citizens' groups. Put a strong moderator in charge who can facilitate proceedings and keep the discussion on track and reasonable.

◆ Never hesitate to ask tough questions—or questions that seem obvious. Get all the answers you need to have confidence in the project.

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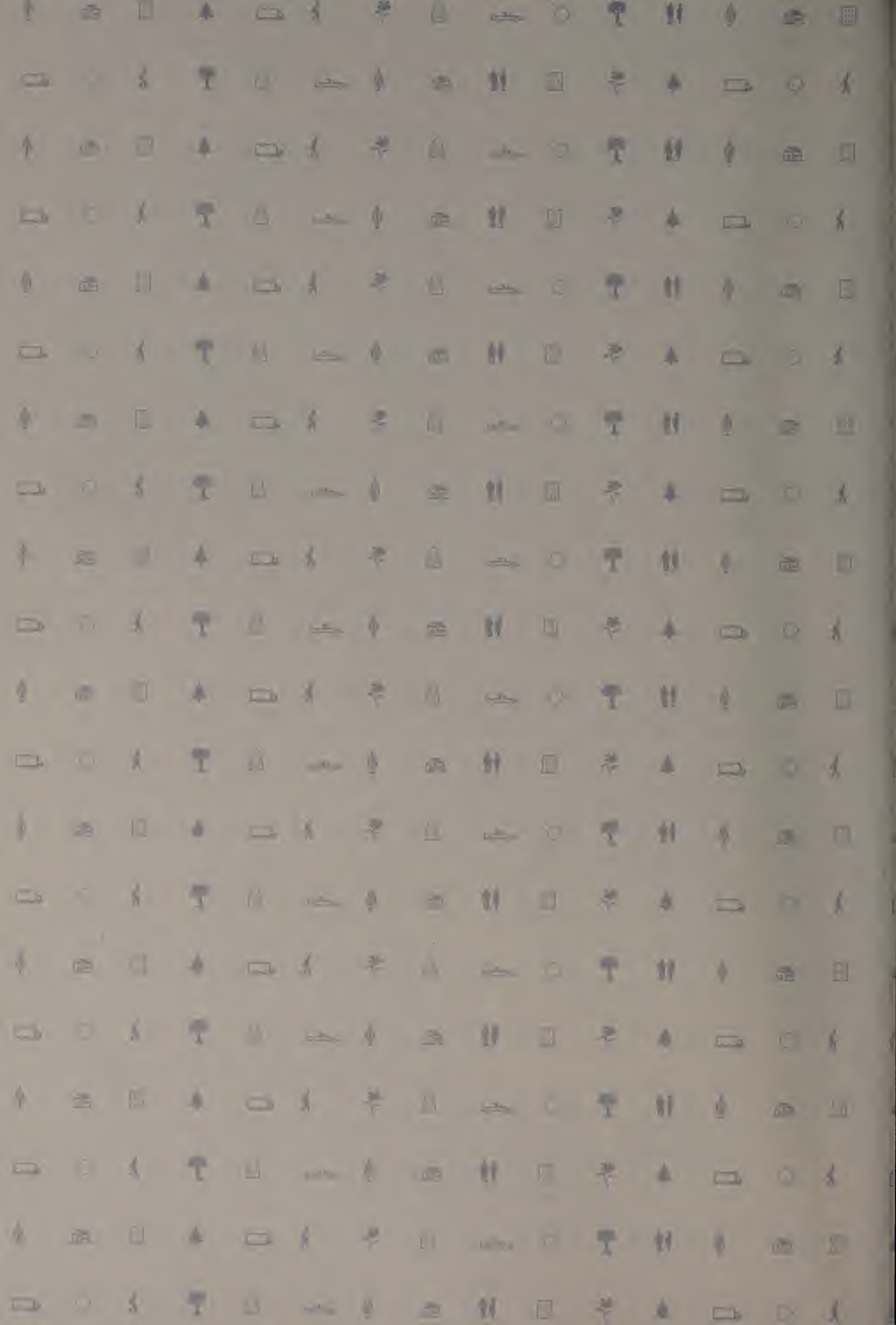
FINDING HELP

Help for planning and design projects comes in many forms.

The following pages list state programs which offer financial or

technical assistance to localities; regional planning agencies which

do the same; land trusts and non-profit groups who consider com-

munity assistance part of their mission; schools in which graduate-

level planning and design interns may be found; and suggested

readings, from practical handbooks to general histories and theories

of planning and design.

USEFUL RESOURCES

" They say the houses in Malu

in Tomboke are fine. That the

houses in Malu are fine. In

Malu the houses have stories.

But it is the people who are

fine, Not the storied houses. "

SONG OF THE DOGON

BETSY CULLEN

STATE PROGRAMS

State programs may change from year to year. If you have trouble getting information at any of the phone numbers listed below, ask for the public relations office of the department you are dealing with. Your state legislator or his or her legislative assistant may be helpful in getting information on appropriate programs for your community. Finally, the Office of the Secretary of State maintains an information line, (617) 727-7030, that acts as a directory to state government and provides telephone numbers as well as information on programs and the state legislature.

Executive Office for Administration And Finance

Division of Capital Planning and Operations
One Ashburton Place
Boston MA 02108   (617) 727-4057

Office of Real Property
Maps of all state-owned property in each of the 351 Massachusetts municipalities may be requested from this office.

Executive Office of Communities and Development

100 Cambridge Street
Boston MA 02202   (617) 727-7765

Strategic Planning Program
(617) 727-3179
Grants available for the hiring of consultants to study planning issues related to growth management, land use, and affordable housing.

Grant Program
(617) 727-7001 (800) 392-6445
Grants available for the study of site-specific development proposals.

Urban Revitalization Development
Grants (617) 727-7180
Grants for the development of urban revitalization plans related to specific sites.

Incentive Aid Program (617) 727-3253
Grants for the improvement of municipal and school district management.

Massachusetts Housing Partnership
(617) 727-0494 and (617) 727-7824
The Municipal Advance Program grants sponsor feasibility studies of potential sites for affordable housing.

The MHP Challenge Grants support innovative housing strategies. Innovations may occur in any of several categories: physical design; land use management; finance; communication and education; project packaging; or some combination of these categories. This agency also distributes the results of research sponsored by Challenge Grants.

Executive Office of Environmental Affairs

Division of Conservation Services
100 Cambridge Street
Boston MA 02114   (617) 727-1552

Conservation District Offices
The six Conservation District Offices in Massachusetts provide limited technical assistance and matching grants to communities wishing to create open space plans. Office addresses are available from the Division of Conservation Services in Boston.

Self-Help Grants
Funds up to 80% of the acquisition costs of conservation land. In order to apply, a municipality must complete an open space plan that meets with DCS approval. Requirements are available from the DCS office in Boston.

Urban Self-Help Grants
Funds up to 90% of the costs of acquiring and/or developing park and recreation lands in cities.

Federal Land and Water Fund
Funds up to 50% of the costs of acquiring and/or developing recreation lands.

Department of Environmental Quality Engineering
Division of Water Pollution Control
Lyman Schoolgrounds, Westview Bldg.
Westborough MA 01581
(508) 366-9181

Clean Lakes Program
Distributes grants annually for studies of publicly-owned lakes and clean-up programs to benefit them. Will also provide an analysis of any publicly-owned lake in Massachusetts that has public access.

Department of Environmental Quality Engineering
Division of Water Supply
One Winter Street
Boston MA 02108 (617) 292-5526

Aquifer Land Acquisition Program
Funds the acquistion of land protecting aquifers supplying municipal wells.

Community Groundwater Protection Planning
On request, program staff will 1) visit a community to offer advice about what kinds of ground water studies might be appropriate; 2) provide maps and information on the water systems of a municipality; and 3) advise a community of land use practices or controls that will help maintain the integrity of its water supply.

Water Protection Atlas
Atlases may be consulted at the regional DEQE offices. Each municipality has been issued map overlays that are part of the atlas. The overlays show water sources, waste sources, aquifers, and drainage basins. Copies available from DEQE.

DEQE Handbook Series
DEQE has prepared a series of nine handbooks on water supply problems. The handbooks are available for reading or copying at DEQE or its regional offices.

Department of Environmental Management
Division of Planning and Development
225 Friend Street
Boston MA 02114 (617) 727-1360

Connecticut Valley Action Program
The program provides both technical and financial assistance for the acquisition of conservation or recreation land fronting the Connecticut River.

Heritage State Parks Program
Program funding sponsors coordinated acquisitions and improvements aimed at revitalizing cities through recovery of deteriorated historic districts.

Land Acquisition
Staff develop plans for acquiring new state lands, including coastal property, inland swimming areas, inholdings, trails, and lands important for ecosystem protection. Lands which fit the state's acquisition strategy are purchased as funds become available.

Department of Fisheries, Wildlife, and Environmental Law Enforcement
100 Cambridge Street
Boston MA 02202 (617) 727-3151

Natural Heritage Program
Maintains a data base, in cooperation with the Nature Conservancy, on rare species habitats in Massachusetts. Provides local maps showing critical and significant habitats of rare species of plants and animals.

Adopt-a-Stream Program
The Adopt-a-Stream Program lends technical assistance to organizations at all levels of sophistication who would like to help protect a river by protecting one of its tributary streams or watershed areas.

Riverway Program
The Riverway Program Coordinates the efforts of communities along the Assabet River to save and restore the river.

Riverway Contract Program
Program staff work with existing watershed associations on strategies for acquiring land in river watersheds, by both fee-simple and other means such as conservation easements.

Department of Food and Agriculture
Bureau of Land Use
Old Common Road, Safford House
Lancaster MA 01523 (508) 727-0465

Agricultural Preservation Restriction Program
Helps localities to purchase the development rights for local farmlands. This proram provides financial remuneration to farmers who would like to sell their land and helps the community maintain its character and avoid the encroachment of large, uncontrolled developments.

Municipal Farmland Identification Program
Program staff are now mapping all Massachusetts farmlands according to their tax status, including such information as whether they are in production full-time and whether they are owned or rented. Communities can use this information to judge the vulnerability of farmlands to development, or their desirability as conservation lands.

Massachusetts Council on the Arts and Humanities

Department of Design and Development
80 Boylston Street
Boston MA 02116 (617) 727-3668

Rural Design Assistance Program
Funding is available to assist rural towns in planning to preserve town character in the face of mounting development pressures.

Office of the Secretary of State

Massachusetts Historical Commission
30 Boylston Street
Boston MA 02116 (617) 727-8470

Massachusetts Preservation Projects Fund
This program grants money for the development, acquisition, or archeological investigation of sites on the State Register of Historic Places.

Survey and Planning Program
Small amounts of funding are available to local historic commissions for the survey and planning of registered historic districts, buildings, or landscapes. MHC also has regional overviews of architecture, topography, and settlement patterns; local historic maps; and the State Register of Historic Places.

State Archaeologist
Keeps an inventory of all archeological sites throughout the Commonwealth. The archeologist or another representative of that office will visit communities to consult with them on strategies for preserving archeologically valuable sites as open space.

Historic Cemeteries and Burial Grounds
Legislation prohibits damage to historic cemeteries and burial grounds, including unmarked Indian burial grounds. Information on historic cemeteries and their protection is available through the state archeologist.

United States Department of Agriculture

Farmer's Home Administration
Natural Resource Management Agency
415 West Street
Amherst MA 01002 (413) 253-3471

State Office Environmental Coordinator and Engineer
Provides a Natural Resource Management Guide for the State of Massachusetts on request. This includes an inventory of both natural and cultural resources and state and federal laws affecting them.

University of Massachusetts

Center for Rural Massachusetts
Hills North
Amherst MA 01003 (413) 545-2255
Provides planning assistance to rural communities on a limited basis.

Cooperation Extension Service
Community and Resource Development Program
Hills North
Amherst MA 01003 (413) 545-0027
Assists and advises Massachusetts communities in creating land use plans. Ten field offices.

REGIONAL PLANNING AGENCIES

Regional planning agencies provide a variety of services, and no two agencies are identical. Some offer limited financial assistance, while others offer only technical assistance, consultations, and help with grant applications. To find out what types of assistance are available to your community, call the planning agency in your region.

Berkshire County Regional Planning Commission
10 Fenn Street
Pittsfield MA 01201 (413) 442-1521

Cape Cod Planning and Economic Development Commission
First District Court House
Barnstable MA 02630 (508) 362-2511

Central Massachusetts Regional Planning District Commission
340 Main Street, Rm. 767
Worcester MA 01608 (508) 756-7717

Franklin County Commission
Courthouse, P.O. Box 1578
Greenfield MA 01302 (413) 774-4015

Martha's Vineyard Commission
Box 1447
Oak Bluffs MA 02557 (508) 693-3453

Merrimack Valley Planning Commission
350 Main Street
Haverhill MA 01830 (508) 374-0519

The Metropolitan Area Planning Council
110 Tremont Street
Boston MA 02108 (617) 345-7376

Montachusett Regional Planning Commission
76 Summer Street
Fitchburg MA 01420 (508) 228-9625

Northern Middlesex Area Commission
144 Merrimack Street
Lowell MA 01852 (508) 454-8021

Old Colony Planning Council Regional Planning Agency
47 West Elm Street
Brockton MA 02401 (617) 583-1833

Pioneer Valley Planning Commission
26 Central Street
West Springfield MA 01089
(413) 781-6045

Southeastern Regional Planning and Economic Development District
880 Broadway
Taunton MA 02780 (508) 824-1367

NON-PROFIT CONSERVATION AND PLANNING ORGANIZATIONS

Association for the Preservation of Cape Cod, Inc.
P.O. Box 636
Orleans MA 02653 (508) 255-4142
Conducts and publishes research on environmental issues concerning Cape Cod.

Berkshire Natural Resources Council
8 Bank Row
Pittsfield MA 02101 (413) 499-1596
Acquires and manages land in the Berkshires for public use. The council assists landholders and occasionally communities in planning to preserve and protect land.

The Conservation Foundation Successful Communities Program
1250 Twenty-Fourth Street NW
Washington DC 20037 (202) 293-4800
Lends technical assistance to communities trying to accommodate growth while retaining assets such as open space, historic buildings and neighborhoods, views, and farmland.

The Environmental Lobby of Massachusetts
3 Joy Street
Boston MA 02108 (617) 768-7241
Offers interpretation of and information on Massachusetts land use laws, and technical instruction on the creation of land banks.

Essex County Greenbelt Association
82 Eastern Avenue
Essex MA 02129 (508) 768-7241
Advises municipalities on the acquisition and management of conservation lands. Has mapped all existing green spaces in Essex County and makes this information available on request.

Historic Massachusetts, Inc.
45 School Street
Boston MA 02108 (617) 723-3383
Operates programs to encourage preservation and to facilitate preservation efforts at the local level.

Massachusetts Association of Conservation Commissions Inc.
Lincoln Filene Center
Tufts University
Medford MA 02155 (617) 381-3457
Holds planning-related workshops in the fall and offers the services of their board members at professional consultant's rates ($100/hr.). Prints and mails a conservation newsletter.

The National Endowment for the Arts
1100 Pennsylvania Avenue NW
Washington D. C. 20506
(202) 682-5438
Grants funds for the advancement of design and planning to organizations including local governments and to individuals.

National Trust for Historic Preservation
Northeast Regional Office
45 School Street
Boston MA 02108 (617) 523-0885
Offers instruction and limited financial assistance in revitalization and preservation.

The Nature Conservancy
New England Field Office
294 Washington Street, Rm. 851
Boston MA 02108 (617) 541-1908
Identifies habitats, unique natural features, and rare resources, and will advise and assist in their protection.

The New Alchemy Institute
237 Hatchville Road
East Falmouth MA 02536
(508) 564-6301
Distributes information on innovations in farm operation.

Partners for Livable Places
1429 21st Street NW
Washington D.C. (202) 887-5990
A clearinghouse of information on design and planning topics.

The Trust for Public Land
3 Joy Street
Boston MA 02108 (617) 742-1340
Lends technical assistance to urban communities on conversion of neglected lands into community open spaces.

The Trustees of Reservations
572 Essex Street
Beverly MA 01915 (508) 921-1944
Advises communities on assessing their conservation requirements and devising strategies to meet them.
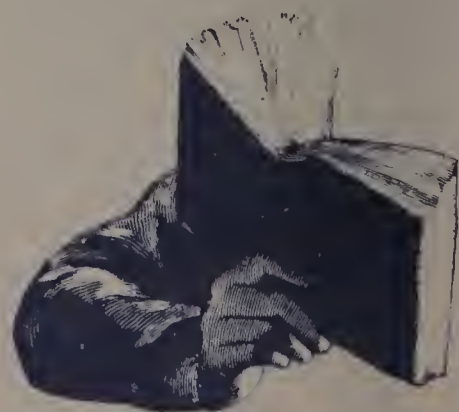
SOURCES OF GRADUATE INTERNS FOR PLANNING AND DESIGN PROJECTS

The institutions below may be helpful to the community planning process in a number of ways. Through them, you may be able to hire a qualified student intern to assist in a planning or design project at less-than-professional rates. For more professional guidance from the faculty, you may be able to find a student interested in making your community's project into an independent study, or you may find a professor who would like to conduct an entire studio based on your community. Studios are often very useful but not always. They can show a series of options for a community, but if their academic goals do not overlap with the goals of the community, the results maybe less informative. This can be anticipated ahead of time by careful consultation with the teacher. In addition to the list below, many other institutions provide interns on a more limited basis. Call your local community college and explore the possibilities with the career development office.

Atlantic Center for the Environment
39 South Main Street
Ipswich MA 01938-2321
(508) 356-0038

Conway School of Landscape Design
Delabarre Avenue
Conway MA 01341   (413) 369-4044

Environmental Intern Program Northeast
68 Harrison Avenue
Boston MA 02116   (617) 426-4783

Harvard University
Graduate School of Design
(Departments of Architecture, Land-
scape Architecture, and Urban Design)
48 Quincy Street
Cambridge MA 02138   (617) 495-4731

Harvard University
John F. Kennedy School of Government
79 JFK Street
Cambridge MA 02138   (617) 495-1335

Massachusetts Association of Conservation Commissions, Inc.
Lincoln Filene Center
Tufts University
Medford MA 02155   (617) 381-3457

Massachusetts Institute of Technology
School of Architecture and Planning
77 Massachusetts Aveneue
Cambridge MA 02139   (617) 253-2022

Radcliffe Seminars
Landscape Design Program
6 Ash Street
Cambridge MA 02138   (617) 495-8600

Tufts University
Department of Urban and
Environmental Policy
Medford MA 02155   (617) 381-3394
Internship Office   (617) 381-3395

University of Massachusetts
Department of Landscape
Architecture and Planning
Amherst Campus
Amherst MA 01002   (413) 545-2255

University of Massachusetts/Boston
Harbor Campus and Downtown Center
Boston MA 02125
Environmental Science (617) 929-8255
Geography/Earth Science (617) 929-8550

PROFESSIONAL ASSOCIATIONS

American Institute of Architects
1735 New York Avenue NW
Washington D.C. 20006 (202) 626-7300
(Provides information on local chapters.)

American Planning Association
1776 Massachusetts Avenue NW
Washington D.C. 20036   (202) 626-7300
(Provides information on local chapters.)

American Society of Landscape Architects
4401 Connecticut Avenue NW, 5th Floor
Washington D.C. 20008 (202) 686-2752
(Provides information on local chapters.)

Boston Society of Architects
Massachusetts State Association
of Architects
305 Newbury Street
Boston MA 02115   (617) 267-5175

Boston Society of Civil Engineers
Two Center Plaza
Boston MA 02108   (617) 227-5551

Massachusetts Association of Community Development Corporations
81 Canal Street
Boston MA 02114   (617) 523-7002

Massachusetts Association of Conservation Commissions
Lincoln Filene Center, Tufts University
Medford MA 02155   (617) 381-3000

Massachusetts Association of Consulting Planners
47 Winter Street
Boston MA 02108   (617) 423-7135

Massachusetts Farm Bureau Federation
15 Great Road
Bedford MA 01730   (617) 275-4374

Massachusetts Federation of Planning Boards
187 Mill Street
Haverhill MA 01830   (508) 372-2159

Massachusetts Municipal Association
60 Temple Place
Boston MA 02108   (617) 426-7272

Society of Environmental Graphic Designers
47 Third Street
Cambridge MA 02141 (617) 577-8225

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Audio-Visual Aids

Films, slide shows, or videocassettes can be an excellent way to inform residents of the possibilities for their communities, galvanize interest in a project, or provide a quick educational seminar for a local planning board, ad hoc committee, or the entire town meeting.

A directory of films and videos on design and planning is available from Partners for Livable Places, 1429 21st Street NW Washington D.C. (202) 887-5990. It is called *Focus: A Design Film and Video Guide*, edited by Mary Bruton.

The following films are available from Fact/USA, 491 Broadway, 11th Floor, New York, NY 10012, (212) 966-0713.

City Visions (1979). Directed by Charles P. Lyman; produced by Atlantic Productions. Common urban problems and potential solutions. (Festival Citation.)

Hey Pal and *Architecture's Everywhere* (1983). Produced by Stan Ouse; Directed by John Komsmacqewski. Public service announcements that invite residents to notice architecture.

Livable Streets (1981). Directed by Peter Bosselmann; written by Peter Bosselmann and Donald Appleyard. Innovative parking solutions. (Festival Citation.)

The following films are available through the National Trust for Historic Preservation, 1785 Massachusetts Avenue, NW Washington D.C. 20036.

Getting Organized. Shows how three communities revitalized their main streets.

Bringing in Business. Illustrates the Main Street approach to effective business recruitment.

Investing in Your Image. Shows how three communities created a new image for themselves through design.

Keeping up Appearances. Slide-tape on restoration, rehabiliation, reconstruction, and renovation.

Main Street at Work (videocassette).

The Main Street Approach. An 80-slide-show illustrating the critical aspects of downtown revitalization.

The following slide shows are available from Design Communications Inc., Suite 1009, 1346 Connecticut Avenue, NW Washington D.C. 20036.

Design—The Most Visible Art

Cities by Design

Grassroots to Greenbacks

The following slide shows are available from the Design Arts Program of the National Endowment for the Arts.

Design Competitions.
How to hold them and why.

Places as Art. An inspirational look at the design of the environment. Produced by Maguire/Reeder, Ltd.

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COLOPHON

ABOUT THE AUTHORS

Anne Mackin is a former planner for the Massachusetts Department of Environmental Management. She writes on topics related to design and planning. Her firm, Designwriting, offers technical writing services to design professionals, government agencies, and institutions. She received a Master of Landscape Architecture from Harvard University and a B.A. in comparative literature from Bennington College.

Alex Krieger is a partner in the firm of Chan Krieger Levi, Architects, Inc., and Professor of Architecture and Urban Design at Harvard University's Graduate School of Design. He received the Master of City Planning and Urban Design from Harvard and a Bachelor of Architecture from Cornell University.

OTHER READERS & CONTRIBUTORS

Kathy Gips
Office of Handicapped Affairs, Commonwealth of Massachusetts

Cherie Kleusing
Walker-Kleusing Design Group

Pallas Lombardi
Public Art Consultant, Cambridge Arts Council

Michael Moore
Program Coordinator, Massachusetts Arts and Public Places

Richard Schwartz
Director of Public Information
Massachusetts Council on the Arts and Humanities

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